CODESWITCHING: INSTRUCTOR USE OF L1 IN ESL CLASSROOMS

Robert Van Benthuysen

Abstract

This article reports the results of a survey that investigated Japanese ESL learners' attitudes towards use of Japanese L1 by their instructors. The results showed that student attitudes differed depending on the purpose for which L1 was used and also depending on the native language of the instructor.

It's probably safe to say that almost all native-speakers of English who teach ESL in Japan use English in their classrooms and that these teachers would like their students to use English in the classroom as much as possible. Many would argue that it is not necessary for a teacher to know his students' L1, and that use of L1 in the classroom should be banned or severely restricted. However, it is also true that, in fact, students frequently use L1 in the classroom and some teachers use it as well. In the SLA literature, this use of L1 by students in the classroom is referred to as codeswitching. Ogane (1997) observed that researchers have examined codeswitching behavior from several different aspects. She delineated three approaches to research: "a) how the bilingual mind works (psycholinguistic); b) the formal properties of linguistic systems (structural); and c) the social, historical, and interactive processes of individuals and groups in language contact situations (sociolinguistic)" (p. 108).

This article will focus on sociolinguistic aspects of codeswitching behavior. Specifically, I am interested in student opinions and expectations regarding the use of L1 by their teachers. After a brief review of some of the literature on use of L1 in the ESL classroom, there will be a report of the results of a survey designed to examine a group of Japanese university students' attitudes towards their teachers' use of L1 during class.

Literature Review

This literature review will begin by looking at some general articles on codeswitching

and the idea of English-only in the ESL classroom.　It will then summarize some of the research on use of Japanese L1 in ESL classes, in particular, use of L1 by teachers.

Ogane (1997) conducted a case study of Japanese ESL learners' codeswitching behavior in ESL classes.　She focused on the reasons that her subjects reported for using Japanese in their ESL classes.　She found that students used L1 tags, conjunctions, fillers, nouns, and short phrases in order to gain thinking time, smooth the conversation, get important points across, and signal for help (p. 118).　She speculated that, in codeswitching, Japanese ESL learners "may be appealing to their dual identities of L1 speaker and L2 learner" (p. 119). She concluded that it is important for teachers to be aware of students' needs to express themselves in L1 and suggested that standards of competency should include bi/multilingual models.

Auerbach (1993) traced the historical and political roots of the English-only movement in ESL education and argued that it derives from an ideology of power and can be specifically connected to British neo-colonial policies.　She cited research that "suggests the rationale used to justify English only in the classroom is neither conclusive nor pedagogically sound" (p. 15).　She claimed that use of L1 actually has benefits in that it can reduce anxiety and enhance the affective environment for learning, facilitate incorporation of learners' life experiences into the learning process, promote learner-centered curriculum development, and allow for language to be used as a meaning-making tool. She also claimed that use of L1 is beneficial for learners at all skill levels, not only, as some have argued, for low-level learners.　She finally addressed the "taken for granted assumption ⋯⋯ that ESL teachers don't need to know students' languages to teach ESL" (p. 25) and concluded that this assumption needs to be reexamined.　In a direct reply to Auerbach, Polio (1994) maintained that Auerbach had been vague in her references to "use" of L1 in the classroom, had neglected to distinguish between EFL and ESL teaching situations, had made claims that are not supported by current SLA theory, and had failed to recognize that "it is possible to teach language to empower students using only the L2" (p. 156).　Polio concluded by writing that she hoped ESL teachers would not use Auerbach's article as an excuse to "simply switch over to the students' L1 when they sense miscomprehension or to ignore SLA research in favor of politically motivated practices" (p. 156).

Burden (2000) surveyed 290 Japanese university students on their opinions about if, when, and for what purpose ESL teachers should use L1 in the classroom.　He concluded that "students want the teacher to use the target language exclusively when it is being used in communication, but expect the teacher to have a knowledge of, and an ability to use MT [mother tongue] when it is appropriate to explain the usage of English" (p. 10).　He thus

distinguished between "use" and "usage." Examples of "use" for which the majority of students felt L1 was inappropriate were giving instructions, explaining the reasons for an activity, testing, explaining class rules, and talking about culture. Examples of "usage" related L1 of which either the majority or a large percentage of students approved were explaining new words and explaining differences between L1 and L2 grammar. Burden also broke down his sample into four skill levels and compared responses of students at different levels of skill. Here he found that lower-level students were more likely to favor use of L1 by teachers. Burden (2001) also conducted a later survey in which he compared native English speaking teachers' opinions and Japanese college students' opinions about use of Japanese in ESL classes. His results showed that both students and teachers agreed that sometimes use of L1 is appropriate. They also, in some cases, were in agreement about the purpose for which L1 should be used. However, in other cases, there was disagreement about when a teacher should use L1. For example, teachers felt it was appropriate to use L1 to give instructions, explain class rules, explain the reasons for doing an activity, and check understanding. Students felt that those were all inappropriate occasions for L1 use by the teacher. Burden concluded that teachers need to be more aware of when their students want the teacher to use L1 and when they would prefer that the teacher not use L1.

Other researchers have looked into the question of Japanese L1 use in ESL classes in Japan. Cole (1998) concluded that students can benefit from appropriate teacher use of L1, especially in order to explain new words, explain grammar, and to facilitate explanation of complex instructions. Atkinson (1987) referred to the mother tongue as a "neglected resource" and maintained that use of L1 "has, at all levels, a variety of roles to play which are at present consistently undervalued, for reasons which are for the most part suspect" (p. 247). Yamamoto-Wilson (1997) began his discussion of this topic with a contrastive analysis of some features of Japanese and English syntax. He went on to argue that awareness of such features can aid learning and that therefore an approach that draws on and makes use of students' own languages can be a useful pedagogical tool. Barker (2003) summarized some of the arguments and evidence for and against use of L1 in ESL classes and concluded that it is important for ESL teachers to be able to use their students' mother tongue.

Research Questions

The survey and data analysis have been designed to examine the following questions:

1. What are Japanese university students' attitudes towards use of L1 by English native

-speaker ESL teachers in their ESL classes?

2. What are Japanese university students' attitudes towards use of L1 by Japanese native -speaker ESL teachers in their ESL classes?

3. Is there a difference between students' attitudes towards use of L1 by English native -speaker teachers and Japanese native-speaker teachers?

4. Do student attitudes towards use of L1 in ESL classes differ depending on the purpose for which it is used?

Methods

Participants. Three-hundred-nineteen students returned completed surveys. The participants were first and second year students studying at two universities in the Tokyo area. Two-hundred-sixth-nine were English Communication majors and 50 were International studies majors. All the students were taking a core ESL curriculum consisting of two classes per week of listening/speaking, one class of reading, and one class of writing. Most of those classes were taught by native speakers of English; some classes were taught by native speakers of Japanese who are fluent in English and who are expected to use English as the medium of instruction in their classes.

Materials. The survey instrument consisted of 14 questions with a 5-point Likert scale response. Two questions (1 and 4) were about students' general attitudes towards use of Japanese in their ESL classes; the remaining questions were intended to investigate research questions 3 and 4, concerning the differences in student attitude towards use of L1 by English native-speaker teachers and Japanese native-speaker teachers, and the purposes of L1 use. The survey was written in Japanese. An English translation is in the Appendix.

Procedures. The survey was administered during class time by this researcher and six other teachers, three of whom were native English speakers and three of whom were native Japanese speakers. Students were given no instructions other than to read the questions and circle their responses.

Results

Descriptive statistics for full sample. The descriptive statistics in Table 1 show that the distribution of the responses for many of the individual items is skewed. It can also be seen that the responses cluster around a score of 3. The significance of these scores can be further explained through factor analysis.

Table 1 Descriptive Statistics for Full Sample

Statistic	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
Mean	2.83	2.44	3.02	2.90	2.68	3.20	2.63	3.52	2.13	2.69	2.54	3.31	2.55	3.24
Mode	2.00	2.00	3.00	3.00	2.00	4.00	2.00	4.00	2.00	3.00	2.00	4.00	2.00	4.00
Median	3.00	2.00	3.00	3.00	3.00	3.00	2.00	4.00	2.00	3.00	2.00	3.00	2.00	3.00
Low-High	1－5	1－5	1－5	1－5	1－5	1－5	1－5	1－5	1－5	1－5	1－5	1－5	1－5	1－5
Range	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
SD	1.02	1.05	0.97	0.97	1.07	0.99	1.00	0.94	0.94	0.98	0.99	0.95	1.03	1.00
N	319	319	319	319	319	319	319	319	319	319	319	319	319	319

Factor analysis. The data were first examined to determine if factor analysis was appropriate. Sample size is an important consideration is deciding whether or not to conduct a factor analysis. Field (2005, pp. 639-640) has summarized the research on this question and concluded that a sample size over three-hundred, with at least 15 participants per variable can provide an adequate factor solution. The data in this study, with an N size of 319 and 14 variables, meet those criteria. In addition, the Kaiser-Meyer-Olkin measure of sampling adequacy had a value of .87. Bartlett's test was significant, indicating that the correlation matrix is not an identity matrix.

Factor extraction was conducted by Principle Component Analysis. A reconsideration of the items in the survey led to the hypothesis that most of the questions might be grouped under the following two constructs: 1) student attitudes toward use of L1 by native English

Table 2　Rotated Component Matrix

Variable	Component	
	1	2
1	.690	.007
2	.748	.223
3	.165	.687
4	－.432	.139
5	.733	.214
6	.345	.682
7	.728	.256
8	.109	.826
9	.778	.203
10	.333	.636
11	.744	.212
12	.121	.775
13	.772	.221
14	.219	.695

speaking teachers, 2) student attitudes toward use of L1 by native Japanese speaking teachers. A two-factor extraction was requested, followed by Varimax rotation with Kaiser Normalization. The results are in Table 2.

In the survey, items 1, 2, 5, 7, 9, 11, and 13 concerned student attitudes towards use of L1 by native speakers of English. In the rotated component matrix, all of those items loaded exclusively on component 1. Survey items 3, 6, 8, 10, 12, and 14 concerned student attitudes towards use of L1 by native speakers of Japanese; those items all loaded exclusively on component 2. The only anomalous item was item 4, which concerned the students' own use of L1 in the classroom. These results suggest that two separate constructs underlie the questions on the survey and that students' responses differ with regard to each of these constructs.

Comparison of mean scores for full sample. A comparison of means analysis was carried out to determine if there were significant differences between mean scores for items that corresponded to the two constructs revealed in the factor analysis. For example, questions 2 and 3 both concern teacher use of Japanese in ESL class; the difference between the two questions has to do with whether the teacher is a native speaker of English or a native speaker of Japanese. The same difference can be seen in items 5-6, 7-8, 9-10, 11-12, and 13-14. The mean scores for these pairs of questions were compared.

Since the data did not meet the assumption of normality necessary for parametric tests the Wilcoxon Signed-Rank test was used to check for significant differences in means between the paired questions. The results (Table 3) indicated that there was a significant difference in the mean scores for each paired comparison. The p value was set at .01; a Bonferroni correction was applied to adjust for multiple comparisons.

Table 3 Wilcoxon Signed-Rank test results

Items	T	Z	Sig.	r
Q2 − Q3	80.39	−8.55	.000*	−.54
Q5 − Q6	77.64	−8.39	.000*	−.53
Q7 − Q8	63.10	−11.26	.000*	−.71
Q9 − Q10	47.29	−9.24	.000*	−.58
Q11 − Q12	49.50	−10.22	.000*	−.64
Q13 − Q14	70.60	−9.76	.000*	−.61

*p<.002 Bonferroni correction for multiple comparisons

Differences in student attitude based on purpose of L1 use. Research question 4 concerned differences in student attitudes regarding the purpose for L1 use in the ESL

classroom. For example, questions 5 and 6 both asked how the students felt about teachers using L1 to explain the meaning of new words. The difference between questions 5 and 6 was that question 5 concerned L1 use by a native English speaking teachers and question 6 concerned L1 use by native Japanese speaking teachers. In order to focus on the students' attitudes towards use of L1 for a specific purpose, regardless of the native language of the teacher, a new variable was created by combining the student responses for questions 5 and 6. The same procedure was applied to questions 7-8, 9-10, 11-12, and 13 -14. Descriptive statistics for the resulting variables are in Table 4.

Table 4　Attitudes Towards Purpose of L1 Use

Statistic	Q5/6	Q7/8	Q9/10	Q11/12	Q13/14
Mean	2.94	3.07	2.41	2.93	2.89
Mode	3.00	3.00	2.00	3.00	3.00
Median	3.00	3.00	2.50	3.00	3.00
Low-High	1 − 5	1 − 5	1 − 5	1 − 5	1 − 5
Range	4.00	4.00	4.00	4.00	4.00
SD	0.91	0.81	0.85	0.81	0.88
N	319	319	319	319	319

A One-Sample t Test was conducted to determine whether the mean scores differed significantly from a score of 3, this being the mid-point on the Likert scale indicating a neutral response to the question. The only significant result was for Q 9/10, which concerned use of L1 to give instructions in class.

Table 5　One Sample t Test for Attitudes Towards Purpose of L1 Use

Item	t	df	Sig.	Mean diff.	r
Q5/6	−1.10	318	.272	−.056	.004
Q7/8	−1.62	318	.106	.074	.008
Q9/10	−12.45	318	.000*	−.589	.33
Q11/12	−1.53	318	.128	−.069	.007
Q13/14	−2.04	318	.043	−.100	.013

*p<.002 Bonferroni correction for multiple comparisons

Discussion

Research question 1 concerned Japanese university students' attitudes towards use of Japanese by native-speaker English teachers. The survey items that relate to this question are 2, 5, 7, 9, 11, and 13. Item 2 is the most general question (Native English speaking

teachers should use Japanese in their classrooms). Table 1 shows a mean response of 2.44 for this question, indicating that students slightly prefer that their native English speaking teachers not use Japanese in the classroom. The remaining items concerning native English speaking teachers also show mean responses slightly below 3, with item 9 (Native English speaking teachers should use Japanese to give instructions) having the lowest response, 2.13.

The results for research question 2, concerning use of Japanese by native Japanese speaking teachers, are almost a mirror-image of the results for the first research question. That is, the mean responses for items 3, 6, 8, 12, and 14 are all slightly above 3. Item 10 is the only item in this group with a mean response below 3 (2.69). These results suggest that these students overall approve the use of Japanese by native speaking Japanese teachers.

The results for research questions 1 and 2 are not that interesting in themselves. Although there do seem to be some differences in responses to the two questions, the mean responses cluster closely around 3, making it difficult to say how important those differences are. However, more interesting results begin to emerge when the data are analyzed from a different perspective. Research question 3 examines the difference between students' attitudes towards use of Japanese by native speaking English teachers and native speaking Japanese teachers. The first step in analyzing the response to this question is to look at the results of the factor analysis in Table 2. The rotated component matrix showed two distinct constructs underlying the items in the survey. As has already been pointed out, the items concerning use of Japanese by native speaking English teachers loaded on factor 1, and the items concerning use of Japanese by native speaking Japanese teachers loaded on factor 2.

This suggests that there is a clear difference between the students' attitudes with regard to native speaking English teachers compared to attitudes towards native speaking Japanese teachers. However, in order to assess the magnitude of this difference it is necessary to look at the results from the comparison of means test in Table 3.

Table 3 shows the results of the Wilcoxon Signed-Rank test. Each survey item dealing with use of Japanese by a native English speaking teacher for a particular purpose was paired with the corresponding item regarding use of Japanese by a native Japanese speaking teacher. The test results indicate a significant difference for every item. Furthermore, the effect sizes are strong, ranging from $r = -.53$ to $r = -.71$. The results show that use of Japanese by a native speaking Japanese teacher is more acceptable to students than use of Japanese by a native English speaking teacher.

Tables 4 and 5 provide information about research question 4, which examined differences in student attitude based on the purpose for which Japanese is used in the classroom. As has already been explained, new variables were created in order to focus on the purpose of Japanese use without regard to the native language of the teacher. Table 4 shows that the means, modes, and medians for these items Q5/6, Q7/8, Q11/12, and Q13/4 all cluster around 3, suggesting that overall student attitude with regard to these questions is neutral. Q9/10 stands out from the others, with a mean of 2.41 a mode of 2.00 and median of 2.50. The results for the One Sample t Test (Table 6) confirm that only Q9/10 differs significantly from the neutral point on the Likert scale. This item concerned teacher use of Japanese to give instructions in the classroom. The effect size ($r=.33$) is moderate, suggesting that students prefer that their teachers not give instructions in Japanese.

Q5/6, Q7/8, Q11/12 all concerned teacher use of Japanese to explain linguistic features (vocabulary and grammar). These items produced non-significant results while Q9/10, which does not deal directly with linguistic features, showed a significant difference from the neutral Lickert scale score of 3. From this we might conclude that, if Japanese is used in the classroom, students prefer that it be used to explain linguistic features. These findings are in accord with the results reported in Burden (2000). As previously described in the literature review, he distinguished between "use" and "usage," concluding that students were accepting of L1 when it was used to explain linguistic features of the target language, but preferred L2 to be used for classroom management.

Conclusions

The results of this study indicate that student attitudes toward use of Japanese L1 in the ESL classroom differ a good deal with regard to the native language of the teacher and differ somewhat depending on the purpose for which L1 is used. These results may not be too different from what many teachers might have intuited, based on their experience, but some of the details revealed in the analysis are interesting. The large effect sizes shown in Table 3 show a rather strong difference in student attitudes towards L1 use depending on the native language of the teacher. In addition, the students seem to prefer that if L1 is used, it be used to explain linguistic features of English, rather than to manage the class, as in giving instructions.

One implication of the study is that native speaking Japanese teachers who want to use English in ESL classes and program administrators who expect native speaking Japanese teachers to use English in ESL classes should consider student expectations regarding use of L1 by native Japanese speaking teachers as opposed to use of L1 by native speakers of

English. It may be that the students are less willing to accept use of the target language (English) by native speakers of Japanese.

The results also suggest that, from the students' point of view, use of L1 is more appropriate for some classroom activities rather than others. As we've seen, the students seem to at least accept, or even desire, L1 explanations of linguistic features, but do not want L1 used for classroom management. Teachers might take this into account when using L1 in the classroom.

Further research can be done in this area. The present study showed some differences in attitudes with respect to the purpose for which L1 is used in the classroom, but the differences did not seem so clear. A study that focused exclusively on this question might produce more useful results.

Finally, the participants in this study were all either English language majors or International Studies majors and, as such, had some degree of motivation for and interest in learning English. Many students at university in Japan who are majoring in other areas are only enrolled in English classes in order to fulfill a university language requirement. These students might respond to the questions on this survey differently, and this could also be an area for further research.

Appendix: English translation of survey questions
 1. Native English speaking teachers should also know Japanese.
 2. Native English speaking teachers should use Japanese in their English classes.
 3. Native Japanese speaking teachers should use Japanese in their English classes.
 4. Students should never speak Japanese in English classes.
 5. Native English speaking teachers should use Japanese to explain the meaning of new words.
 6. Native Japanese speaking teachers should use Japanese to explain the meaning of new words.
 7. Native English speaking teachers should use Japanese to explain grammar.
 8. Native Japanese speaking teachers should use Japanese to explain grammar.
 9. Native English speaking teachers should use Japanese to give instructions.
10. Native Japanese speaking teachers should use Japanese to give instructions.
11. Native English speaking teachers should use Japanese to explain differences between Japanese and English grammar.
12. Native Japanese speaking teachers should use Japanese to explain differences between Japanese and English grammar.
13. Native English speaking teachers should use Japanese to check students' understanding.
14. Native Japanese speaking teachers should use Japanese to check students' understanding.

Responses were on a 5 point Likert scale, translated literally as follows :
1. Definitely don't think so   2. Don't think so   3. Can't say either way   4. Think so   5. Really think so

References

Atkinson, D.（1987）． The mother tongue in the classroom: a neglected resource? *ELT Journal*, 41（4）: 241-247.wq

Auerbach, E.（1993）． Reexamining English only in the ESL classroom. *TESOL Quarterly*, 27（1）: 9-31.

Brown, J.D.（2001）． *Using Surveys in Language Programs*． Cambridge University Press.

Barker, D.（2003）． Why English teachers in Japan need to learn Japanese. *The Language Teacher*, 27（2）: 7-11.

Burden, P.（2000）． The use of the students' mother tongue in monolingual English 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*, 25（4）: 5-9.

Field, A.（2005）． *Discovering Statistics Using SPSS*． Sage.

Ogane, E.（1997）． Codeswitching in EFL learner discourse. *JALT Journal*, 19（1）: 107-121.

Polio, C.（1994）． Comment on Else Roberts Auerbach's "Reexamining English only in the ESL classroom." *TESOL Quarterly*, 28（2）: 153-161.

Yamamoto-Wilson, J.R.（1997）． Can a knowledge of Japanese help our EFL teaching?. *The Language Teacher*, 21（1）: 6-9.