## Factors related to the desire for $L 1$ support in the EFL classroom

Paul Joyce<br>Kindai University, Osaka, Japan<br>Kindai University, Department of Law, 3-4-1 Kowakae, Higashiosaka-shi, Osaka, 577-8502, JAPAN<br>Email: pauljoyce@hotmail.com

Hans von Dietze
Peace Lutheran College, Cairns, Australia
Alison von Dietze
St. Andrews Catholic College, Cairns, Australia
Brian McMillan
Stonepark Intermediate School, Prince Edward Island, Canada


#### Abstract

This study investigated the issue of L1 use in the L2 classroom from the students' perspective. Specifically, the focus of this study was on the characteristics of learners who desired L1 classroom support in their L2 learning. For the purposes of the study, a convenience sample of 380 Japanese university-level EFL participants completed a series of questionnaires and an L2 proficiency test. After the data had been subjected to descriptive and inferential analysis, the results suggested that L2 proficiency could be the strongest predictor of desire for L1 support in the EFL classroom, followed by L2 ambiguity tolerance and L2 learning motivation, respectively. Moreover, gender was not found to be a statistically significant variable. It was concluded that in


order to promote a fruitful match between the students' learning style and the teacher's instructional methods, an English only EFL classroom is not always suitable in the Japanese context.

Keywords: L2 learning, L1 use, L2 proficiency, L2 ambiguity tolerance, L2 learning motivation, gender

## Introduction

For much of the 20th century, as English assumed the position of "global language" (Crystal, 1997), shifts in second language teaching and learning pedagogy have contributed to promoting the English only classroom. Indeed, in 1961, five basic tenets for second language (L2) use in English language teaching were advanced during a conference in Mekarere University, with the first tenet being that English is best taught monolingually (Phillipson, 1992). Likewise, the audiolingual method listed as one of its five basic tenets that, "the native language should be banned from the classroom" (Chastain, 1976, as cited in Hadley, 2001, p. 111). Similarly, a stipulation of communicative language teaching is that the first language (L1) is to be avoided (Bruhlmann, 2012). Moreover, when Krashen presented his monitor theory (1982), the L1 was only mentioned in a negative light, associating it with language interference and errors. All these teaching approaches promulgated the notion that the L1 should be absent from the foreign language classroom so that students' learning of the new language could be fast-tracked through maximum exposure to input and maximum opportunity for output of the target language (Yphantides, 2021). As a result, English seemingly became the only legitimate language in the classroom, and the English only approach, where English is taught and learned through English, gained ascendancy.

In contrast, rather than being constrained by a prescribed teaching methodology, the use of L1 support in the L2 classroom has depended upon individual teachers' views and classroom philosophies (Yavuz, 2012), and as a result rather than eschewing the students'
mother tongue, a majority of teachers have consistently been found to favor the utilization of classroom L1 support (Macaro, 2001). However, although the inclusion of the L1 in the EFL classroom is supported by a growing body of research (e.g., Putrawan, 2019; Yphantides, 2021), there remains uncertainty on best practice. As Ford (2009) notes:

> Throughout 10 years of university teaching experience in Japan, I have tended to favor a strict English-only classroom policy, in terms of both teacher and student language use. However, this is something I am beginning to question, from both critical and practical perspectives. (p. 64)

It is also important to consider student preferences with respect to L1 use when determining classroom policy and practice (see Auerbach, 1993; Barker, 2003; Nunan, 1989; Carson \& Kashihara, 2012a) for learners come to the L2 classroom with perceptions of L1 use which may be shaped by a variety of influences, including their own previous learning experiences, school policies and rules, their own knowledge of language acquisition theory, and popular notions regarding language learning received from friends and family, or the media. Some learners may prefer that the L1 be used sparingly, or not at all, even when it could in fact be helpful. For instance, they may want to maximize their exposure to L 2 input and production in the hope of experiencing a more "natural" immersionlike experience (Prodromou, 1992). Alternatively, they may feel that they benefit more from trying to deduce what the teacher and other students are saying in the target language, and from negotiating meaning without the aid of L1 support (Macaro, 1997). On the other hand, studies have also shown that many learners desire L1 support in a wide range of learning contexts (e.g., Duff \& Polio, 1990; Dujmović, 2007; Jingxia, 2010). For example, learners may appreciate L1 support to achieve a clearer understanding of the target language (Sampson, 2012), express their personality and identity (Carless, 2007), build deeper interpersonal connections (Edstrom, 2009) and lower their affective filter (Bawcom, 2002). Learners may
also understand that codeswitching is a communication tool that bilinguals use naturally in conversation (Poplack, 2001). As a result, for many students, the use of L1 support is a "learner-preferred strategy" (Atkinson, 1987, p. 422). Indeed, it has been surmised that "the closer the match between a student's learning style and the teacher's instructional methods, the more likely the student will experience academic success" (Irvine \& York, 1995, p. 491). It is therefore pertinent that in a study of 305 university students in Japan (Carson \& Kashihara, 2012b), most students preferred that instructors know the L1. Moreover, "regarding whether or not the L1 should be used in the L2 classroom, students generally felt that it should, but agreement declined with increasing L2 proficiency" (p. 44). It would therefore seem worthwhile for instructors to be aware of the learner characteristics that are associated with the desire for L1 support, such as L2 proficiency, so they can better tailor their instruction to the needs of their learners. To address this issue, this study explored four learner characteristics suggested to be of importance in determining a student's desire for L1 support. They were L2 proficiency level, ambiguity tolerance, motivation for L2 learning, and gender.

## L2 Proficiency

L2 learner proficiency is frequently cited as an important factor in determining classroom language choice (e.g., Du, 2016; JeeYoung Shin et al., 2020; Jinxia, 2010). Indeed, there have been several research studies that have explored this issue with students at differing proficiency levels. For example, Burden (2000) canvassed 290 Japanese university students on whether English language teachers should use the L1 in class and found that while a majority of pre-intermediate ( $83 \%$ ) and intermediate ( $63 \%$ ) students felt that teachers should use the L1, only 41 percent of advanced learners concurred. In a similar study, Prodromou (1992) asked the same survey question obtaining a similar pattern of responses from 300 Greek L2 learners with a large proportion of beginners (66\%) and intermediate (58\%) learners believing that the teacher should use the

L1, albeit with only a minority of advanced learners (29\%) agreeing. However, in a third study that used the same survey question, Nazary (2008) obtained divergent findings from 85 Iranian students who when asked whether the teacher should use the L1, gave similar proportion of responses regardless of their proficiency level, with elementary (22\%), intermediate (16\%), and advanced learners (21\%) providing the same responses. Despite this divergence, the results from these studies have provided some guidance on the issue. However, the use of a single yes/no question in these studies limits the insight that they could offer.

In a more sophisticated study, Mouhanna (2009) asked university students in the UAE whether they supported teachers' use of Arabic in the English classroom. The 124 participants were asked to respond on a scale of strongly agree (1) to strongly disagree (5), and all of the groups surveyed were found to support L 1 teacher support. However, as expected, there was the greatest desire for teacher L1 support from the beginner (2.38) students, followed by the intermediate (2.93) and advanced (3.11) learners, respectively. Moreover, subsequent t-tests showed a significant difference between the beginner and intermediate, and beginner and advanced learners' responses. Likewise, in a study involving Japanese university students, Norman (2008) asked what percentage of the time students would like their native English-speaking teacher to use the L1 in the classroom, and the average was a remarkable 42 percent. Indeed, when the responses from the English majors who had studied abroad was compared with the non-English majors who had not, there was a significant difference between the two groups. The clear implication being that L2 proficiency is negatively related to the desire for L1 classroom support. However, as useful as these studies are, they measured interest in L1 support through a single questionnaire item which leaves the content validity of the results as a concern.

Yet, in a further study, Carson (2014) surveyed 1,424 Japanese university students on their preference for L1 usage by their teacher dividing the participants into four proficiency groups based on their TOEIC scores and found numerous significant
preference differences between higher proficiency students and lower proficiency students suggesting L2 proficiency is related to the demand for L1 support. However, since the effect size results were not given, the magnitude of this demand remains unclear.

## L2 Ambiguity Tolerance

Ely (1995) refers to Ambiguity Tolerance (AT) as the ability to cope with a state of uncertainty-a feeling which is commonly experienced by language learners who are routinely confronted with numerous forms of linguistic uncertainty. For example, when engaging in L2 reading, learners have to simultaneously overcome phonological, syntactic, semantic, and cultural challenges amongst others, any of which can obstruct understanding (El-Koumy, 2000) where tolerance of ambiguity has been found to be associated with a host of good learning strategies including willingness to take risks, searching for patterns in linguistic meaning, and monitoring one's production (Aksoy, 2019). With this in mind, a study incorporated the relationship between AT and L1 strategy use was conducted by Ely (1989) with learners of Spanish at an American university. Of the 41 strategies included in this study, the relationship between the 84 participants' scores on the survey and three strategies pertaining to L1 strategy use was explored. A statistically significant relationship was found between AT and how soon participants looked up the L1 meaning of an unknown L2 word, and whether they were able to identify similarities between an unknown L2 word and a L1 word. However, AT was not found to be related to how swiftly participants sought to guess the meaning of an unknown L2 item in their L1. Moreover, a case study of two Japanese learners showed that while the more ambiguity tolerant student was comfortable to engage in extensive reading without checking a dictionary, the second sought to understand the meaning of sentences through his L1 (Nishino, 2007). In addition, it has been found that L2 ambiguity tolerance is related to anxiety (Dawaele \& Li Wei, 2013; Thompson \& Lee, 2012). For example, in a study involving 73 secondary school students in Hong Kong, Dewaele and Shan Ip (2013) found that students who were less
tolerant of L2 ambiguity were more anxious in their EFL classes and felt less proficient. Indeed, it seems that anxiety levels rise, so does the affective filter, which further inhibits L2 acquisition (Krashen, 1982), and it is clear that the $L 2$ classroom can be a stressful environment for students (Alrabah et al., 2016; Burden, 2004). It is also evident that the L1 can reduce ambiguity and thereby lower the affective filter (Auerbach, 1993). In fact, it has even been argued that this is the primary role of students' L1 in the L2 language classroom (Meyer, 2008). Thus, through the use of L1 support, AT-related anxiety can be alleviated and the teaching and learning process facilitated.

## L2 Learning Motivation

The suitability of L1 support in the L2 classroom has also been linked to student L2 motivation (e.g., Suzuki, 2020). However, opinion on this subject is divided. On the one hand, it has been suggested that the prohibition of the L1 implies the rejection of the learners' culture and language (Auerbach, 1993), and that this consequentially has obvious negative repercussions for motivation and morale. Therefore, through the provision of L1 support, a positive learning environment can be created. Likewise, as noted by Ellis (2012, p.128), "theories of L2 motivation...lend support to the use of the L1 as a means of... creating rapport in the classroom." Similarly, Norman (2008) reports that while his university L2 learners in Japan could often be "unresponsive, inattentive and/or unwilling to speak," motivation vastly improves once he mixed L1 into his classroom speech. On this point, Critchley (2002) observes:

> an all-English exchange of the complex ideas that can promote immediacy may not be possible with demotivated or lower-level learners. With these learners, teachers should use Japanese when appropriate to build positive and mutually supportive relationships that will promote student motivation (p. 121).

Notably, when instructors do not respond to this need, Burden (2001) finds the result can be an unhappy experience for all. Indeed, teachers have reported that the benefits of teacher L1 use accrue to all but the most highly motivated of classes (Macaro, 1997).

In contrast, it has also been reasoned that maximizing classroom L2 exposure leads to increased motivation and that the greater the students' exposure to the L2, the greater the perceived value of L 2 knowledge. As a result, there is an increase in instrumental motivation to acquire the language (Macaro, 1997). Likewise, it has been argued that through provision of L1 support, there is diminished need for the students to further their understanding of the L2 (MacDonald, 1993).

## Gender

Regarding the desire for L1 classroom support, there are also indications that gender-based differences play a role (Clark \& Trafford, 1996; Kissau \& Salas, 2013). For instance, male learners have been found to react more negatively than females towards the teacher exclusively using the L2. For example, in a study exploring the attitudes of British secondary school students towards L2 learning (Jones \& Jones, 2001), a boy declared, "Sometimes they babble on in French and I haven't got a clue what she's going on about...I have to ask" (p. 24). Likewise, in the Japanese university context, Burden and Stribling (2003) found that female students had a significantly more positive attitude toward their English studies than males and were also significantly more prepared to speak to their teacher in the L2. However, given the scarcity of studies in this area, there have been calls for further research to determine the effects of gender on attitudes toward bilingual support (e.g., Critchley, 1999; see also Jingxia, 2010).

Building on previous findings, this study sought to address L2 students' desire for classroom L1 support, through the following research question:

To what degree can Japanese university students' preference for classroom L1 support be explained by their L2 proficiency, L2 ambiguity tolerance, L2 learning motivation level, and gender?

## Method

## Participants

The research population was drawn from a university in Tokyo, Japan. All of the students were enrolled in the university's first year EFL program as liberal arts majors. Of the 380 participants, 143 were male and 237 were female. In terms of proficiency, the students could broadly be described as being from a false beginner to an intermediate level. Based upon their performance on the Computerized Assessment System for English Communication (CASEC) test, the learners' performance on the TOEIC was estimated to average 380 points ( $S D=119$ ) (see Maruzen, 2003 for more details). Since the selection of the participants was determined by the cooperation of EFL instructors, a convenience sample was used. However, all of the students who had the opportunity to participate in the study elected to do so.

As part of their university commitments, all of the participants in this study were required to take four 90-minute classes of English a week: two lessons focusing on listening and speaking, and two lessons concentrating on reading and writing. One teacher taught a group of students for the listening-speaking classes, and a different teacher taught the same group of students for both of the reading-writing classes. Students from 23 different class groups took part in this study, and the participants were taught by a total of 32 different instructors. All of the participants received instruction in their L2 classes from two native English-speaking teachers. This was done to control for any possible differences in student expectations of native and non-native teachers' classroom behavior (Polio \& Duff, 1994).

## Materials

There were four research instruments used in this study:

1) The Japanese in the Classroom Survey was used to measure desire for L1 support. The questionnaire comprised eight items that collectively referred to L1 use by the teacher, student L1 policy, and L1 use in the classroom materials (see Appendix 1). The students used a four-point Likert scale to rate the extent to which they agreed or disagreed with the various statements. As was the case with all of the questionnaires used, to ensure that the survey could be easily understood by the participants, it was translated into the learners' L1.
2) To measure ambiguity tolerance, the Second Language Tolerance of Ambiguity Scale (SLTAS) (Ely, 1995) was used. This was selected as it is the only questionnaire designed for measuring ambiguity tolerance in language learning and has been successfully used in a number of previous EFL studies (e.g., Kazamia, 1999; Sakamoto, 2003). The questionnaire consisted of 12 items and the participants responded through a four-point Likert scale (1. Strongly agree, 2. Agree, 3. Disagree, and 4. Strongly disagree). A high score on the questionnaire indicated that the student was highly ambiguity tolerant in their L2 English study.
3) The Motivation Questionnaire (Sick, 2004) was based on the socio-educational model of Gardner and Lambert (1959). Each of the five items on the research instrument (see Appendix 2) corresponded with a component in the model: (a) attitude toward the learning situation, (b) instrumental orientation, (c) integrative orientation, (d) lack of anxiety when communicating in English, and (e) anticipated effort.
4) The L2 proficiency of the participants was evaluated though the CASEC test, which is a widely used general proficiency computer adaptive test that was developed by
the Society for Teaching English Proficiency (STEP), the largest testing institution in Japan. In terms of validity, CASEC and TOEIC scores have a .86 correlation. Furthermore, the reliability of CASEC test scores are highly consistent in the .96 to .98 range (Hayashi et al., 2004).

## Procedure

The research instruments were administered in two sessions towards the end of the participants' first year of study at the university. In the first session, the students completed the questionnaires, which typically took around half an hour. In the second session, which occurred within two weeks of the first, the students were administered the CASEC test.

## Data Analysis

The data from the four research instruments were screened for multivariate and univariate outliers, as well as multicollinearity, linearity, and homoscedasticity. Moreover, to confirm that the questionnaires each measured a common underlying dimension, the L1 in the classroom, L2 learning motivation, and L2 ambiguity datasets were subjected to principal component analysis (PCA) with oblique rotation which is a dimensionality-reduction method that transforms a number of correlated variables into a smaller number of uncorrelated factors and is well suited to analyzing questionnaire data as factors are considered to reflect latent processes underlying data (Tabachnick \& Fidell, 2007). For all three surveys, the participants' factor scores' coefficients (regression method) were extracted and used in the later analyses. However, factor scores coefficients are often negative, which are both unintuitive and unsuited to some statistical techniques. Therefore, the data were transformed into positive scores that were centered on a mean of 50 with a standard deviation (SD) of 10. Then, for ease of interpretability, the L1 classroom support results were inverted. Therefore, after the descriptive phase of the analysis, high scores on the three surveys were indicative of a student being relatively interested in L1 support
in the classroom, having a high L2 learning motivation, and high L2 ambiguity tolerance. In order to ensure that the data met the assumptions of a normal distribution both the L1 in the classroom and the L2 ambiguity tolerance variables were winsorized at $2 \%$ (top $1 \%$, bottom $1 \%$ ).

To address the research question, Pearson's product-moment correlation coefficient analysis was used to statistically explore the direction and strength of the relationship between students' preference for classroom L1 support and their L2 proficiency, L2 ambiguity tolerance, and L2 learning motivation level. Since gender is dichotomous, the relationship between this variable and the others was determined using point-biserial correlations (males were coded as 1 and females as 0 ), which are mathematically equivalent to Pearson correlations. However, since Pearson correlation analysis is limited in its ability to explain the independent contributions of different variables, multiple regression analysis was also employed. The L1 in the classroom scores were used as the dependent variable (DV) and the four remaining sets of scores as the independent variables (IVs).

## Results

In order to better understand the learners' attitudes towards L1 support in the classroom, the descriptive statistics for each of the items within the questionnaire have been provided. As previously mentioned, the questionnaire used a four-point scale (1. Strongly agree, 2. Agree, 3. Disagree, and 4. Strongly disagree) with the midpoint on the scoring continuum being 2.5. An overview of the descriptive results is shown in Table 1 and the mean frequency of each response type to each item is shown in Table 2.

Table 1
Descriptive Results - Desire for L1 in the classroom

| Questionnaire items | M | SD |
| :---: | :---: | :---: |
| Q1. The teacher should use Japanese every lesson. | 2.98 | 77 |
| Q2. My teacher should be able to give explanations in Japanese. | 2.05 | . 69 |
| Q3. I believe that an English only classroom is the best way to learn English. | 2.62 | . 78 |
| Q4. I would like my English textbook to contain Japanese support. | 2.31 | . 80 |
| Q5. I think it is very important that my English teacher can speak Japanese well. | 2.12 | . 72 |
| Q6. The use of Japanese with my partner and/or group helps me learn English. | 2.39 | . 73 |
| Q7. I think it is better to use an English/Japanese dictionary than an English/English dictionary. | 2.28 | . 71 |
| Q8. It's important to me that I can ask questions in Japanese to my teacher. | 2.28 | . 77 |

Table 2
Summary of Responses (mean)

|  | Strongly <br> Agree | Agree | Disagree | Strongly <br> Disagree |
| :--- | :---: | :---: | :---: | :---: |
| Q1. | 4.47 | 17.11 | 54.21 | 24.21 |
| Q2. | 17.63 | 63.68 | 15.00 | 3.68 |
| Q3. | 6.32 | 37.89 | 43.68 | 12.11 |
| Q4. | 13.68 | 49.47 | 29.21 | 7.63 |
| Q5. | 17.63 | 55.00 | 24.74 | 2.63 |
| Q6. | 7.63 | 52.63 | 32.89 | 6.84 |
| Q7. | 11.58 | 52.11 | 32.89 | 3.42 |
| Q8. | 12.37 | 54.21 | 26.58 | 6.84 |

With reference to the instructor, most students (78.42\%) did not show a desire for L1 teacher use every lesson (Q1: $M=2.98, S D=$ .77). However, 81 percent of those surveyed expected the teacher to be able to give explanations in the L1 if required (Q2: $M=2.05, S D=$ .69) and 77 percent agreed that the teacher should be able to speak the L1 well (Q5: $M=2.12, S D=.72$ ).

Regarding classroom language policy, a clear majority of participants (60.26\%) was inclined to recognize the value of L1 communication with other students for L2 learning (Q6: $M=2.39, S D$ $=.73$ ). A similar result ( $66.58 \%$ ) was found for communication with their teacher (Q8: $M=2.28, S D=.77$ ). Thus, as would be expected, most disagreed (55.79\%) that an exclusively English only classroom (Q3: $M=2.62, S D=.78$ ) was the ideal learning environment. Lastly, most participants (63.16\%) supported the use of the L1 in their textbooks (Q4: $M=2.31, S D=.80$ ) and a similar percentage preferred the use of a bilingual dictionary (Q7: $M=2.28, S D=.71$ ). The Cronbach alpha internal consistency reliability of the questionnaire was found to be .86 . Since a coefficient in excess of .70 is commonly cited as acceptable for educational research (e.g., Nunnally, 1978; Kline, 2005), this figure was considered highly satisfactory.

The overall descriptive results for the four research measures can be found in Table 3. The Cronbach's alpha internal consistency for the students' responses to the L2 learning motivation ( $a=.75$ ) and L2 ambiguity tolerance $(a=.88)$ questionnaires were also found to be satisfactory.

Table 3
Overall Descriptive Results - L1 in the classroom, L2 learning motivation, L2 ambiguity tolerance and CASEC

| Variable | M | SD | min. | max. |
| :--- | :---: | :---: | :---: | :---: |
| L1 in the classroom ${ }^{\mathrm{a}}$ | 18.79 | 3.18 | 8 | 32 |
| L2 learning motivation | 13.22 | 3.02 | 5 | 20 |
| L2 ambiguity tolerance | 29.78 | 5.73 | 12 | 48 |
| L2 proficiency (CASEC) | 440.88 | 109.59 | 169 | 754 |

[^0]As discussed in our data analysis section, the data were screened for outliers. This screening identified two univariate outliers with $z$-scores in excess of 3.29. In accord with suggested practice (Tabachnick \& Fidell, 2007), the outlying raw scores were assigned a value one unit greater than the most extreme non-outlying point.

For the L1 in the Classroom Survey, the sampling adequacy for the analysis was verified by the Kaiser-Meyer-Olkin measure (KMO $=.86)$. Furthermore, Bartlett's test of sphericity $\left(x^{2}(28)=786.569, p<\right.$ .001) indicated that the correlations between the items were sufficiently large for principal component analysis (PCA). Regarding the extraction of components, both the Kaiser criterion and scree plot approaches showed that there was only one meaningful factor, which explained $44 \%$ of the variance. The component matrix showed that the correlations between the variable and the components averaged .66 and ranged between .50 (item 7) and .74 (item 1). As these values exceed .4, the components were considered worthy of inclusion (Stevens, 2002).

In the case of the Motivation Questionnaire, the preliminary tests $\left(\mathrm{KMO}=.76\right.$, Bartlett's test of sphericity $\left(x^{2}=(10)=422.365, p<\right.$ .001)) also signified that PCA could proceed. The Kaiser criterion and scree plots both pointed to a one factor solution that accounted for $50 \%$ of the variance. The correlations between the variable and the components were found to average .70 and to vary between .54 (item 1) and .81 (item 2). The SLTAS AT survey items also proved suitable for PCA (KMO = .89, Bartlett's test of sphericity ( $x^{2}(66)=1653.876, p$ <.001)). An initial analysis revealed that there were two eigenvalues that exceeded Kaiser's criterion of 1. However, the point of inflection on the scree plot clearly indicated that only one factor should be extracted. Given the large sample size ( $n=380$ ), it was determined that the scree plot provided a sufficiently reliable criterion for factor selection (Stevens, 2002). Therefore, a further PCA was conducted with just one eigenvalue extracted, which explained 43 percent of the variance in the data. The correlations between the variable and the components averaged . 65 and ranged between .53 (item 6) and .76 (item 8).

As can be seen in Table 4, a range of significant correlations was found. The results showed that there was a negative relationship between the desire for L1 support in the classroom, and L2 learning motivation, L2 ambiguity tolerance, and L2 proficiency. The L1 in the classroom variable most strongly correlated with the L2 proficiency scores ( $r=-.49, p<.01$ ), followed by L2 learning motivation ( $r=-.42$, $p<.01$ ), then L2 ambiguity tolerance ( $r=-.38, p<.01$ ). Gender was also significantly related to desire for L 1 support in the classroom ( $r=$ $-.22, p<.01$ ) with male students wanting more Japanese assistance than females.

Table 4
Correlations between the variables

|  | 1. | 2. | 3. | 4. | 5. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1. L1 in the classroom | - | $-.42^{* *}$ | $-.38^{* *}$ | $-.49^{* *}$ | $.18^{* *}$ |
| 2. L2 learning motivation |  | - | $.20^{* *}$ | $.45^{* *}$ | $-.20^{* *}$ |
| 3. L2 ambiguity tolerance |  |  | - | $.21^{* *}$ | $-.13^{* *}$ |
| 4. L2 proficiency |  |  |  | - | $-.22^{* *}$ |
| 5. Gender |  |  |  |  | - |

${ }^{* *} p<.01$ (two-tailed)

To further pursue the research question, the data were subjected to multiple regression analysis. When all of the independent variables were entered, a statistically significant model was generated $\left(F 4,375=52.50, p<.001\right.$. Adjusted $\left.R^{2}=.35\right)$. However, since gender was a non-significant predictor ( $p=.44$ ), it was removed and the analysis was repeated. A statistically significant regression model containing all three explanatory variables emerged (F3,376 $=69.86, p<.001$ ). The results for the individual variables are provided in Table 4.

Table 5
Summary of multiple regression for variables predicting student interest in L1 in the classroom

| Variable | $B$ | S.E. (B) | $\beta$ | $T$ | $p$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| L2 proficiency | -.030 | .004 | -.342 | -7.331 | .000 |
| L2 ambiguity tolerance | -.263 | .042 | -.266 | -6.257 | .000 |
| L2 motivation | -.205 | .045 | -.212 | -4.559 | .000 |

The standardized partial regression coefficients indicate that L2 proficiency $(\beta=.-34, p<.001)$ made the greatest independent contribution to the prediction of desire for L1 in the classroom. This was followed by L2 ambiguity tolerance ( $\beta=-.27, p<.001$ ) and L2 motivation ( $\beta=-.21, p$ <.001). Collectively, the three variables accounted for 35 percent of the variance (adjusted $R^{2}=.35$ ). Of this explained variance, the first 24 percent was contributed by L2 proficiency, followed by L2 ambiguity tolerance (8\%), and L2 motivation (3\%), respectively.

## Discussion

This study explored the desire for L1 support in the classroom L2 learning context amongst Japanese tertiary level learners of English. An understanding of the desire for L1 support was sought by examining its relationship to a number of personal and cognitive variables: L2 proficiency, L2 ambiguity tolerance, L2 learning motivation, and gender. As was previously discussed, both the correlation and regression results showed L2 proficiency to have the strongest relationship with desire for L1 support in the classroom. Indeed, the multiple regression results showed that L2 proficiency made by far the greatest contribution to predicting desire for L1 assistance in the classroom. Since the direction of the relationship was negative, it was found that beginners had the greatest interest in L1 classroom support. As L2 learners progressed in their English language ability, their desire for such L1 assistance was found to decline. The results from this study aligned with earlier studies in
which lower-level learners had consistently expressed the greatest interest in L1 support (e.g., Burden, 2000; Carson, 2014; Mouhanna, 2009; Norman, 2008).

The second greatest predictor of desire for L1 classroom support suggested by our study was L2 ambiguity tolerance. Since relationship between these two variables was negative, it seemed those students who were the most ambiguity intolerant also had the greatest interest in L1 support. Also, as shown in Table 4 and as found in previous studies (e.g., Chapelle \& Roberts, 1986; Erten \& Topkaya, 2009), lower proficiency learners seemed to be less ambiguity tolerant. Thus, when considering desire for L1 support, the results for these two variables compounded one another.

As previously discussed, the third highest predictor of student interest in L1 in the classroom was L2 motivation. As was the case with the previous two predictors, a negative relationship between the variables seemed likely. Thus, as has been anecdotally suggested (e.g., Critchley, 2002; Ellis, 2012; Norman, 2008), our study suggested that students with higher motivation tended to be less interested in L1 classroom support and vice-versa which may have particular relevance to Japan, the context for this study where regardless of their major, EFL classes are typically a compulsory part of university students' studies and so there could be a preponderance of less motivated learners. In this situation, timely and appropriate use of the L1 could be an effective means to reduce the affective filter and motivate reluctant learners.

The final suspected predictor of interest in L1 classroom support was gender. Although correlation analysis suggested that male students were more interested in L1 support, multiple regression analysis revealed that gender did not make an independent contribution to the predicted desire for L1 support in the classroom. The reason for the difference between the correlation and regression results concerned the relationship between gender and the other variables under investigation. As shown in Table 4, relative to female students, male learners tended to be of lower proficiency, less motivated, and less ambiguity tolerant. However, once the influence
of these three other variables was controlled, gender was no longer found to make a unique contribution.

As has been discussed, both this study and many others have suggested that the use of L1 support is welcomed by many students (Atkinson, 1987). This study suggests that the desire for L1 assistance may be associated with particular learner characteristics. When a teacher's pedagogical approach complements a student's learning style, the likelihood of a successful learning outcome increases (Irvine \& York, 1995). Therefore, if teachers are aware of the learner characteristics associated with a desire for L1 support, they can adapt their teaching style accordingly. There is ample evidence that this is already happening. For instance, teachers have been found to make use of the L1 to verify comprehension, clarify instruction, and provide classroom feedback (Macaro, 1997). On this note, students with a low tolerance for ambiguity have been found in other studies to be more motivated and self-confident once they have a clear grasp of classroom procedures (Dörnyei, 2005; Williams \& Burden, 1997) and more anxious without one (DeRoma et al., 2003).

The results from this study have also suggested that an exclusively English only classroom policy is not suitable for all students. Having said that, it is also important to recognize that exposure to the L2 provides the impetus for successful language acquisition. However, judiciously using the L1 to scaffold learning may not reduce the students' exposure to the L2, but instead improve the quality and quantity of target language use (Macaro, 2005). Far from being incongruous with communicative language teaching, this approach may help students develop their communicative competence (McMillan \& Rivers, 2011). Nevertheless, over a course of study, there should probably be an intention on the part of the instructor to gradually wean students away from L1 support. For example, there should not be any reason to continue repeating the same commands and requests in L1 when they can soon constitute useful L2 exposure.

As discussed earlier, three variables included in this study seemed to have a statistically significant relationship with desire for

L1 support. This constitutes an important step in predicting desire for L1 support and gauging the relative significance of different variables. However, there are undoubtedly predictors that were not included. One of these is time spent abroad as learners' experience of studying English in a native context transfers to the classroom where learners have been shown to have increased ambiguity tolerance (Sakamoto, 2001) and less desire for L1 support (Norman, 2008). A second unmodelled variable is likely to have been how much L1 a teacher uses. However, most learners have reported being satisfied with the amount of L1 their teachers use, regardless of how much that is (Duff \& Polio, 1990). A further cognitive bias could relate to what students have been told about the best way to learn and how much they have accepted this idea (Frankenberg-Garcia, 2000). This factor might help explain why a low-level student, who is highly ambiguity intolerant and has little L2 motivation, could report not wishing to receive L1 support.

The main limitations of this study concerns the homogeneity of the sample population and the use of convenience sampling. The participants were all Japanese university students from one institution who ranged in proficiency from a false beginner to an intermediate level. To make the findings more conclusive and generalizable, it would be fruitful to include learners with a broader range of L2 proficiency from a wider range of cultural and educational backgrounds selected by a more systematic sampling technique. Future research should also explore the influences that shape student beliefs regarding L1 support in the classroom.

## Conclusion

In this study, we investigated learner characteristics that predict student desire for L1 support. Since previous studies had sought to understand this issue by studying individual predictors, the overlap between various variables has not been addressed. This study has sought to provide a more balanced perspective on the desire for L2 support by adopting a multivariate approach. The results suggest L2 proficiency, L2 ambiguity tolerance, and L2 learning motivation
may all be variables of importance. As such, this study, along with many others (e.g., Carson \& Kashihara, 2012a; Duff \& Polio, 1990; Dujmović, 2007; Jingxia, 2010), has suggested that an English only classroom may not always be suitable in the Japanese context. To address this, it is recommended that teachers provide sufficient L1 proficiency to meet the learners' need for selective assistance in their native language. However, this L1 support does not necessarily have to be derived from teacher talk. Instead, instructors can allow students to use their L1 to plan complex tasks or verify their understanding (see Von Dietze \& Von Dietze, 2007). In addition, L1 support can also be provided through the use of bilingual dictionaries and learning materials. Furthermore, rather than a blanket approach to L1 support, instructors can modify their approach depending on the general characteristics of the class as a whole, the needs of individual learners, and the learning environment. Most notably, L1 support can be directed to those who are in most need of it. As this study suggests, the students who most desire L1 support are of lower proficiency, AT, and motivation. Amongst these factors, the strongest predictor of student desire for L1 support seems to be L2 proficiency. As such, an implication of this study relates to student placement. Through the creation of relatively homogeneous classes, teachers can tailor the learning experience to the proficiency level of the students in each class. In contrast, with mixed-proficiency classes, the onus is on the teacher to provide differentiated instruction and this is a more challenging L2 learning environment to gauge the suitability of L1 support. In regard to future research, as has been previously mentioned, it would be beneficial to further research this issue with students from a wider range of educational backgrounds using a more systematic sampling technique and investigate the influences upon student beliefs in L1 support.

## Authors

Paul Joyce is an Associate Professor at Kindai University in Osaka, Japan. He has a Master's degree in TEFL/TESL from the University of Birmingham, UK and a Ph.D. in Applied Linguistics from the University of Surrey, UK. His research interests include vocabulary acquisition, testing, and L2 listening.

Hans von Dietze has taught English at J. F. Oberlin University in Japan, German and French in several high schools, and was general manager of an ELICOS college in Australia. He is currently teaching Japanese in two primary schools in Cairns, Australia. He has a Master's degree in Education (Teaching Second Languages) from the University of Southern Queensland. His research interests include the role of technology in the classroom as well as the role of the L1 in L2 teaching and learning.

Alison von Dietze has a Master's degree in Education (Teaching Second Languages) from the University of Southern Queensland. She taught English at J. F. Oberlin University and at Takushoku University in Japan. It is through her extensive involvement in English as a second language programs in Australia and study abroad programs that she developed her interest in language acquisition and how the role of the L1 in second language acquisition is viewed by teachers and learners. She is currently teaching Japanese in Australia.

Brian McMillan holds a Master's degree in Education (Teaching Second Languages) from the University of Prince Edward Island, Canada. He taught English at Kanda University of International Studies and at Hiroshima Bunkyo Women's University in Japan, and is currently teaching French immersion at the intermediate school level in Canada. The use of the learners' L1 has been the main focus of his research and has played a central role in his teaching practice over the past 25 years.

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## Appendices

## Appendix 1: Japanese in the Classroom Survey (Instructions)

How much you agree with these statements? Choose your answer from the four choices below and mark it on your answer sheet.

1. strongly agree
2. agree
3. disagree

See Table 1 for the items.

## Appendix 2: The Motivation Questionnaire

How true are these statements about you? Choose your answer from the four choices below and mark it on your answer sheet.

1. Not true about me at all
2. Somewhat true about me
3. Not especially true about me
4. Very true about me

Q1. Studying English was very enjoyable for me in high school and junior high school.

Q2. Mastering English communication is very important for my future goals and dreams. I hope to use English in my future career.

Q3. I have a strong interest in foreign people and culture. Through English, I hope to make friends from many different countries.

Q4. Even though I make mistakes, I do not feel shy or anxious about communicating in English. I am looking forward to speaking English in my ELP classes.

Q5. Considering that you will be busy with other classes, club activities, etc., about how much time per week do you hope to devote to studying English outside of class?

1. $0 \sim 30 \mathrm{~min}$
2. $30 \mathrm{~min} \sim 1 \mathrm{hr}$
3. $1 \mathrm{hr} \sim 1 \mathrm{hr} 30 \mathrm{~min}$
4. more than 1 hr 30 min

[^0]:    ${ }^{\text {a }}$ Responses for item 3 reversed.

