# Cross-linguistic awareness-raising practices can enhance written performance in EFL classes in Japanese universities

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#### **Abstract**

In our globalised world, the desire for the acquisition of English has led to increased research into the appropriate pedagogical approaches for learning and teaching the language. This manuscript focuses on the use of learners' mother tongue in the learning and teaching of English in an effort to identify ways in which cross-linguistic awareness-raising practices can be utilised to maximise EFL written performance. The study's targeted grammatical features were articles and plural suffixes of countable nouns and the study's EFL population was drawn from two Japanese universities. A quasi-experimental design was employed with an experimental group receiving cross-linguistic instruction and a control group continuing without cross-linguistic input. Statistical analyses demonstrate that the experimental group outperformed the control group. Although the empirical project is located within the context of Japanese tertiary education, the study is of international relevance as it deals with the perennial issue of how best to harness learners' familiar L1 for the improvement of their L2 within the frameworks of cross-linguistic instruction and awareness-raising.

**Keywords**: L1 use in L2 learning; cross-linguistic input; EFL in Japan; written performance; articles; countable nouns

#### Introduction

English holds the position of the global language in today's world. Indeed, globalisation is inextricably linked to the dominant role of English. As Canagarajah, Kafle, and Matsumoto (2012) state, there is currently a stampede for the acquisition of good English and countries around the globe are prioritising EFL teaching. An issue facing many educational systems is the role of learners' mother tongues in the EFL classroom. One particular aspect of this role is the extent to which the L1 may have a positive influence on the production of EFL.

In the EFL research community, there has been a great deal of debate, with especially lively discussions in the last two decades regarding the role of learners' L1 in the L2 classroom. As Copland and Neokleous (2011) observed, the nexus of interest has shifted from a judicious use of the L1 for supporting L2 learning and teaching to an interest in how the L1 can be used to maximise learning in the L2. However, as the authors also note, academic discussion remains theoretical. Laufer and Girsai (2008) also express surprise that, despite the fact that interest in transfer studies and cross-linguistic influence has been growing since the 1980s, research aimed at informing efforts to overcome L2 learning difficulties has largely failed thus far to investigate how raising learners' awareness to the differences between their L1 and L2 might influence these difficulties. Our study supports the view that incorporating learners' L1 into L2 learning can lead to L2 educational advancement. Specifically, it aims to identify the effects on L2 written performance of introducing conscious and systematic cross-linguistic contrastive practices into EFL classes. It comes at a time when new approaches are called for to better serve English-language learners in today's globalised world (García, Skutnabb-Kangas, and Torres-Guzmán 2006).

## The role of L1 in L2 learning and cross-linguistic instruction

# Use of learners' mother tongue in the learning and teaching of a target language variety

The extensive theoretical discussion about the role of L1 in L2 learning attests to the widespread recognition of the significance of the interplay between the L1 and the L2. Since the 1980s, a number of scholars including Atkinson (1987, 1993), Harbord (1992), Butzkamm (1998, 2003), Cook (2001), Cummins (2009) and de la Campa and Nassaji (2009) have made the case that the mother tongue has a variety of beneficial roles to play in monolingual foreign-language education. Such roles include eliciting language, checking comprehension, giving instructions, testing, enhancing communicative competence, and increasing awareness of the inevitable interaction between the mother tongue and the target language that occurs during any type of language learning. Cook (1992) maintains that teachers must not treat the L2 in isolation from the L1 because L2 learners have their L1s constantly available to them. Similarly, Riches and Genesee (2006) argue that L2 learners draw on their L1 knowledge to serve their L2 learning and note that learners' L2 competence is more than the sum of its parts: L2 learners have unique abilities that result from their bilingual status.

In setting the stage for our study, we review some recent empirical projects carried out worldwide in contexts where English is the L2 variety and in contexts where the target language is another language variety. It should be noted that, as Ford (2009) discovered when reviewing the literature in the field, it is mainly limited to theoretical discussions of arguments for and against L1 use. Empirical evidence is scarce and mostly related to learners' and teachers' perceptions of the inclusion of the L1 in the L2 classroom.

Interestingly, a recent systematic review (Chalmers, in press) of empirical studies published since 1980 which deal with the role of L1 in L2 learning in primary education demonstrated that, although such studies are scarce and may offer contradictory and unclear findings, there is nevertheless a suggestion that using the L1 to teach L2 vocabulary may be beneficial.

In the EFL context, Brooks-Lewis (2009) focussed on Mexican EFL adult learners' perceptions of the incorporation of their Spanish mother tongue into the English class and highlighted their positive response. According to the participants, incorporation of the L1 in the L2 classroom allows for greater participation, meaningful learning, and promotion of confidence (amongst other benefits). In another study that dealt with teachers rather than learners, Copland and Neokleous (2011) focussed on teachers' use of teenaged learners' L1 (Greek) in the EFL classroom and noted that the mother tongue of the students was associated with a number of functions including reprimanding, joking, praising, and translating.

Research has demonstrated that utilising learners' L1 is also beneficial outside of EFL contexts. For instance, in the ESL setting, Auerbach (1993) draws on a number of studies in arguing against the English-only policy and favours the use of learners' native language for the improvement of ESL learning and teaching. More recently, García, Flores, and Woodley (2012) recommended the pedagogy of *translanguaging* as an ideal approach to developing the language practices of emergent bilinguals. This pedagogy is characterised by flexible and unrestrained use of two or more languages in teaching and learning. Focussing on ESL Latinos in the States, the authors recorded improvement in students' English language development and metalinguistic awareness when their entire linguistic repertoire was encouraged in the classroom. The authors suggested that, when the mother tongues of these ESL emergent bilinguals are viewed as invaluable, they become competent in creating new language hybrids and fusions. It is worth mentioning that translanguaging goes beyond crosslinguistic influence and focuses on how bilinguals intermingle linguistic features (García 2009; García and Li Wei 2014; García and Hesson 2015). (For a review of research on

translanguaging practices in the classroom, see Creese and Blackledge (2010) and Hornberger and Link (2012).) An intervention study for Spanish-speaking children with limited English proficiency in the USA (Lugo-Neris et al., 2010) found that children were better at defining English words that were explained to them in Spanish as opposed to words that were explained to them in English alone. Such results are certainly promising and highlight that structured L1-L2 co-existence in the classroom can be beneficial.

In the ESD (English as a second dialect) context, Malcolm and Truscott (2012) assessed the introduction of Australian Aboriginal English into standard Australian English classrooms and discovered evidence of positive influences on repertoire building. In Canada, similar results were recorded regarding the use of Aboriginal English in programmes of Standard English as a second dialect (Ball and Bernhardt 2012). Battisti et al. (2011) noted that students who were allowed to build on their native varieties improved their reading skills in Standard English.

Research outside the English-language sphere has also consistently demonstrated that harnessing learners' mother tongue leads to successful learning of the target variety. In a dialectal setting, Yiakoumetti (2006, 2007) demonstrated that introducing learners' native Greek Cypriot dialect into the classroom led to improved learning of the targeted Standard Modern Greek variety. Similarly, in a Creole setting, Benson (1994, 2004) assessed the introduction of the native Crioulo (or Kriyol) into standard Portuguese classes in Guinea-Bissau and discovered that more students spoke in class and that there was less reliance on rote learning. (For a review of studies on the successful use of expanded pidgins and creoles in education, see Siegel (2012).)

As evidenced above, there is potential for huge benefit when the mother tongue is utilised in L2 educational contexts. We therefore argue that the role of students' native varieties in the teaching of other linguistic varieties should be reassessed such that native varieties are harnessed and appropriately used to facilitate L2 learning. (For other relevant findings regarding the role of the mother tongue in language education, see Yiakoumetti (2012, 2015) and Benson and Kosonen (2013). For detailed reviews of research on ownlanguage use in language teaching and learning, see Littlewood and Yu (2011) and Hall and Cook (2012).)

Cross-linguistic instruction, awareness-raising, and noticing

Cross-linguistic input in L2 learning has been shown to be especially beneficial. A number of

empirical studies attest to the benefits. For instance, Kupferborg and Olshtain (1996)

demonstrated that EFL native Hebrew speakers who were exposed to contrastive linguistic

input outperformed EFL learners who were not exposed to such input. Outperformance was

evident in both recognition and production tasks. The researchers focussed on difficult

grammatical forms such as compound nouns and reduced restrictive relative clauses.

Similarly, the study of Deignan, Gabryś, and Solska (1997) (which focussed on Polish EFL

learners) found that understanding L1-L2 differences in metaphor use can aid L2 metaphor

production. The authors advocated exposure to cross-linguistic awareness-raising activities

which compare L1 metaphors to use in English. More recently, Laufer and Girsai (2008)

demonstrated that contrastive analysis and translation was especially conducive to EFL

vocabulary learning. The authors focussed on contrastive instruction which targeted the use

of single words and collocations by Hebrew EFL learners.

As can be seen from the studies described above, contrastive analysis has recently

resurfaced in a new role which is characterised by a rediscovered compatibility with the

developments seen in L2 acquisition theory (Vizmuller-Zocco 1990; James 1994; Kupferberg

and Olshtain 1996; Sheen 1996; Kupferberg 1999; Horst et al. 2010). Indeed, researchers

have welcomed the renewed interest in contrastive analysis within educational linguistics. Of

course, the new contrastive analysis differs greatly from the original concept. Researchers

today focus on the noticing of salient features through cross-linguistic instruction and argue

that awareness of L1-L2 differences is particularly beneficial for the learning of the L2

(James 1996). For the purposes of this study, the term 'cross-linguistic instruction' is used in

preference to 'contrastive analysis' to avoid unhelpful value-laden interpretations. (For a

discussion of cross-linguistic influences on the learning of additional languages, see Jarvis

(2015).)

Setting of the study: Japan

EFL learning in Japan

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As is the case for many non-English speaking countries, Japan has acknowledged the importance of English and its role in our globalised world (Kubota 2002; Seargeant 2009). The Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) is determined to work towards internationalisation through education, especially English education (Schneer, Ramanathan, and Morgan 2007; Fujita-Round and Maher 2008). As a consequence, it has recently implemented several measures for the improvement of English language teaching and learning.

Specifically, in 2011, MEXT legislated the increase of EFL education through the implementation of mandatory English instruction in all elementary schools (at Grades 5 and 6) across the country (Hashimoto 2011; MEXT 2009). At secondary level, Super English High Schools (SELHi) have been put into place. Between 2002 and 2009, 169 junior high and senior high schools nationwide received funding for innovative English language teaching (MEXT 2002). Native English language speakers are employed to serve as Assistant Language Teachers (ALTs) in an effort to bring native English speech into the classroom (MEXT 2010). More evidence that demonstrates Japan's desire for English is that, although there are many non-English-speaking minorities in Japan (such as Chinese and Koreans), most junior and senior high schools choose to teach English (and not Chinese or Korean) (Sakamoto 2012). It must also be noted that, in addition to formal schooling, English learning is augmented by supplementary evening tuition. At tertiary level, some universities have started to replace part of their entrance examinations with commercially-based tests (such as TOEIC) in an effort to redirect emphasis onto measuring practical English abilities (Sasaki 2008).

However, despite the fact that students receive several years of English instruction, English is considered to be ineffectively learned in formal education (Butler 2007; Mondejar et al. 2012) with Japanese EFL students continuously ranking among the lowest scoring Asian countries on TOEFL (Test of English as a Foreign Language) (Sullivan and Schatz 2009). A plethora of reasons has been proposed as to why Japan has struggled with producing proficient users of English. Hashimoto (2009) argues that Japanese EFL learners' communicative ability has been compromised because of the strict control and regulation of secondary EFL teaching imposed by the Japanese government. Although EFL provision at tertiary level is in principle outside the control of MEXT, policies have again been compromised by political agendas of the government and of universities (Rivers 2011).

Some researchers explain that a key reason for the low EFL proficiency is the influence of testing and examinations that is still exerted despite a recent shift to EFL communicative language teaching (Alderson and Wall 1993; Butler and Iino 2005; Hato 2005). Sakamoto (2012) notes that the majority of teaching still resorts to the traditional direct grammar and translation-based instruction which is thought to best prepare students for success in the high-stake university entrance examinations (Underwood 2010).

Teachers' minimal practical experience prior to commencing teaching and lack of opportunities for teacher development are other factors which have been put forward as contributing to low English proficiency (Nishino and Watanabe 2008; Masataka 2006; Nakata 2010). ALTs, who play an integral role in the country's EFL education, have also been criticised for contributing to learners' low performance. According to Ohtani (2010), many native English ALTs have minimum education, pedagogical qualifications, and training when they begin teaching. The fact that they are native speakers of English is the main criterion for their employment which, undoubtedly, cannot be considered sufficient.

## Targeted problematic language features for Japanese EFL learners

In the current study, two linguistic features were chosen for investigation: articles and plural suffixes of countable nouns. Previous research has highlighted that these features are especially problematic for Japanese EFL learners mainly due to the fact that they have no equivalent forms in Japanese (Koizumi 1998; Iwasaki, Vinson, and Vigliocco 2010).

Whereas English requires the use of both definite and indefinite articles, Japanese has no reliance on such a system and this influences L2 production. Many researchers (Nagata et al. 2006; Izumi et al. 2003; Kawai, Sugihara, and Sugie 1984) have pointed out that Japanese EFL learners' production commonly reflects this linguistic difference in that articles are omitted or used erroneously. Article omission was chosen as the focus of investigation as its absence (i.e. number of instances in which it was omitted) is easily quantifiable. Examples of such errors include 'I have brother' and 'Where is post office?'.

Unlike English, a distinction is not generally drawn in Japanese between the concept of countable and uncountable nouns. This, in turn, becomes an issue in L2 production if it is unacknowledged (e.g. 'I like carrot') or misapplied (e.g. 'I like corns'). Iwasaki, Vinson, and Vigliocco (2010) explain that a major obstacle for Japanese speakers is misdetection of

countability. Kobayashi (2008) describes the problem by noting that Japanese learners of English tend to have a fixed conceptualisation that specific nouns, especially abstract nouns are uncountable. For the sake of research manageability, plural omission was chosen as the second focus of investigation because it is easily identifiable and quantifiable. Examples include the aforementioned 'I like carrot' and 'Do you have any brother or sister?'.

Interestingly, the issue of countability can also be interconnected with article usage. Yoon (1993) considered how native and non-native perceptions of noun countability might differ and how, in turn, this might affect the accuracy of non-definite article usage for Japanese learners. In particular, it was found that uncountable noun perception negatively influenced the use of indefinite articles. In yet another study, Butler (2002) carried out a metalinguistic analysis of how Japanese learners might make choices for their use of articles and concluded that the notions of definiteness and indefiniteness not only affect article usage but also noun countability.

# Aim of the study

This article goes beyond arguing whether learners' L1 should be used in the EFL classroom. As already noted, this issue has been the focus of considerable debate since the late 1980s and the literature makes a clear case that the L1-L2 relationship does warrant attention in the L2 classroom. Our study supports the view that L1 use can be associated with many advantages and we advocate its systematic incorporation into L2 learning and teaching. In addition, it comes as a response to the call of various university instructors (e.g. Carson and Kashihara 2012; Craven 2012; Critchley 1999) who, based on their students' preference for L1-L2 input rather than English-only input, urge the use of Japanese in English classes.

Our study introduced Japanese learners' L1 (Japanese) into their learning of their L2 (English) by focussing on cross-linguistic comparisons and contrasts between the two languages. The study aimed to assess the effects of contrastive intentionally-focussed attention on learners' EFL performance. The concept of noticing and the fact that the L1 influences the L2 provide the theoretical underpinnings of our study. As already noted, the study targeted learners' errors in written production with regard to articles and plural suffixes of countable nouns. Cross-linguistic pedagogical practices were employed which aimed to raise learners' awareness of the differences and similarities between Japanese and English

such that erroneous language transfer could be minimised. The effects of awareness-raising were assessed in terms of the identification and correction of errors and the production of targeted grammatical structures.

#### The study

## Research Design

A quasi-experimental design was employed with an experimental group receiving crosslinguistic instruction and a control group continuing without cross-linguistic instruction. The experimental group was consciously and systematically exposed to L1-L2 comparisons and contrasts (relating to articles and plurals) for a period of four weeks. This interventionist exposure was achieved via error identification quizzes, translation quizzes, think-aloud activities, and discussion on language awareness, all of which were led by the principal researcher. Such cross-linguistic awareness-raising activities have been successfully applied previously (e.g. Scott and de la Fuente 2008). The control group received equivalent Englishonly instruction. Even though no cross-linguistic awareness-raising activities were used in the teaching of the control group, students were explicitly taught about the English article system and plural marking. Just as was the case for the experimental group, control-group students were exposed to quizzes, think-aloud activities, and language awareness discussion albeit only in relation to English. This design was employed to allow us to discount the possibility that task familiarity rather than the intervention itself was responsible for any observed effects. Instruction for the two groups was generally communication-oriented but some formfocused instruction did take place while learners were working on tasks.

## **Participants**

Sixty-nine subjects (who, on average, had studied English formally for seven years) participated in our study. These participants were from four second-year university classes from two universities in Osaka. One class from each university made up the control group (containing 34 participants) and the same arrangement was used to assemble the experimental group (containing 35 participants). Participants in University 1 majored in both Sociology and Business Studies, while those in University 2 majored in International Studies.

## Cross-linguistic awareness-raising activities

Error identification quizzes: These were used at the start of each lesson whereby sentences were presented to learners for error identification and correction. Discussion of the identified error pattern focussed on similarities and differences between Japanese and English. The quizzes included definite and indefinite articles for concrete nouns and plural marking. They were limited to only six sentences and did not include sentences that did not require correction. (Example 1. *Cinema near my house is best in this town* corrects to *The cinema near my house is the best in this town*. Example 2. *I like watching movie there* corrects to *I like watching movies there*.)

Translation quizzes: These were designed to require the use of articles and plural endings. Specifically, three sentences that required articles (both a and the) and three sentences for plural endings appeared in translation quizzes in each lesson. (Example 1. 先月にピーターさんは新しい自転車を買いました translates to  $Peter\ bought\ a\ bicycle\ last\ month$ . Example 2. ellow e

Think-aloud activities: While collaborating on grammar-focused tasks, learners were asked to verbalise their thinking processes when undertaking the article and plural marking activities. Learners were asked particularly to highlight the differences and similarities between Japanese and English usage.

Language awareness discussion: Discussion of the appropriate usage of English articles and plural suffixes in comparison to Japanese usage was central to class activities and was largely facilitated through the use of regular learning tasks (e.g. short in-class written reports as well as in-class reviews of mini essays completed for homework).

#### Assessment

Three periodic tests were carried out: one prior to the commencement of the intervention, one mid-way, and one after the completion of the intervention. Each test consisted of two components: (i) identification and correction of errors and (ii) production of the targeted

linguistic features (in the form of a short paragraph which described a picture). Both components required an exact number of articles and plural suffixes to be calculated which involved different processes. The identification and correction section was relatively simple as it contained a set and unambiguous number of correct and incorrect sentences. Among the total of ten, three sentences contained errors associated with article omission and three with plural suffixes. If one of these was identified through being successfully corrected (thereby demonstrating an apparent understanding of its appropriate usage) a score of one point was assigned. Thus, the maximum possible score was three points for articles, just as three points was the maximum for plural suffixes. Results were statistically analysed to establish whether there was a significant difference between the control and experimental groups. Given the known limitations of learners at this stage, a decision was made to consciously limit the number of sentences in the receptive instruments to six out of ten to avoid taxing them beyond their current abilities. Finally, a balance of definite and indefinite articles with concrete nouns (including one superlative) was deliberately and systematically used in each identification test.

The production section was somewhat more complicated owing to the fact that there was not a finite amount of correct or incorrect responses to be determined. The first criterion was that a full sentence was required in order to qualify for analysis. Consequently, single words, incomplete sentences or list-like constructions were automatically disqualified. If a fully-complete paragraph was produced, the number of possible correct instances for articles and plural endings was calculated and used as a base measurement against the number of actual correct instances in which it was used. This can be illustrated with the following example:

She is in supermarket. She likes apple, banana, orange and peach. Today she's going to buy pineapple and eat it with a friend.

This paragraph necessitates the use of three possible articles (i.e. **a** supermarket, **a** pineapple, and **a** friend), yet an article has only been implemented correctly once (i.e. **a** friend). Therefore, paragraph score would be measured as one correct instance out of a possible three for articles (i.e. 1/3). Similarly, four plurals are required for the general countable nouns quoted here (i.e. She likes apples, bananas, oranges and peaches), but since none of these have been correctly implemented the score would be zero out of four (i.e. 0/4). The pictures used for the production tasks were selected based on their ability to elicit the production of

concrete nouns (fruit, animals and furniture). As with the identification and correction section, the scores were analysed to compare the performances of the control and experimental groups.

Emphasis was placed on quantitative analyses but focus-group interviews were carried out to complement statistical data. Focus group interviews (carried out in Japanese) involved a much smaller sample size, consisting of six participants from the experimental group.

#### **Results**

## Identification-correction of articles

For identification-correction of articles, there was a significant main effect of group ( $F_{1,64}$  = 39.45, p <0.001) and of university ( $F_{1,64}$  = 5.34, p = 0.024), indicating that the control group differed from the experimental group in this regard, just as there was a difference in performance between the two universities. These main effects were, however, qualified by a significant interaction between test and group ( $F_{2,128}$  = 36.32, p < 0.001) which indicates that the performance over the three tests differed between the control and experimental groups. The main effect of test was also significant ( $F_{2,128}$  = 42.82, p < 0.001). Figure 1 plots the students' average performance in identification-correction of articles. Post hoc Student-Newman-Keuls (SNK) means comparison procedures elucidated the differing performances between the control and experimental groups across the three tests. No significant difference in performance across the three tests was detected in the control group. By comparison, in the experimental group, each of the tests fell into a discrete subset, with performance increasing significantly in each successive test.

[FIGURE 1 NEAR HERE]

#### **Production of articles**

The main effect of group was not found to significantly influence performances of the control and experimental group in production of articles ( $F_{1,64} = 1.503$ , p = 0.225, but note the highly significant group-test interaction reported below). However, a difference in performance between the two universities was detected ( $F_{1,64} = 11.48$ , p < 0.001). A significant effect of the interaction between test and group was detected ( $F_{2,128} = 18.26$ , p < 0.001), indicating differing performances between the control and experimental groups across the three tests. The main effect of test was also significant ( $F_{2,128} = 19.67$ , p < 0.001). Figure 2 plots the students' average performance in production of articles. Post hoc procedures detected no differences across the three tests within the control group. However, in the experimental group, performance in each of the tests was found to be different, increasing significantly in each successive test. This improvement is striking and Figure 2 makes it clear that the absence of a statistically significant difference in overall performance across the three tests is due to the fact that the performance of the experimental group is unusually low in the first test.

#### [FIGURE 2 NEAR HERE]

#### Identification-correction of plurals

Performance in identification-correction of plurals was significantly different between groups  $(F_{1,64} \ 89.33, p < 0.001)$  and universities  $(F_{1,64} = 5.48, p < 0.022)$ . These main effects were, however, qualified by a significant interaction between test and group  $(F_{2,128} = 42.40, p < 0.001)$ , indicating differing performances between the control and experimental groups across the three tests. The main effect of test was also significant  $(F_{2,128} = 88.00, p < 0.001)$ .

Figure 3 plots the students' average performance in identification-correction of plurals. Post hoc procedures on the control group data revealed that performance in the first and second tests was indistinguishable while performance in the third tests was notably higher. In the experimental group, performance in each of the tests was found to be different, increasing significantly in each successive test.

## Production of plurals

Performance in production of plurals was significantly different between groups ( $F_{1,64}$  = 44.58, p <0.001) and universities ( $F_{1,64}$  = 15.64, p < 0.001). These main effects were, however, qualified by a significant interaction between test and group ( $F_{2,128}$  = 37.1, p < 0.001), indicating differing performances between the control and experimental groups across the three tests. The main effect of test was also significant ( $F_{2,128}$  = 19.73, p <0.001).

Figure 4 plots the students' average performance in production of plurals. Post hoc procedures were somewhat equivocal for the control group in that, while performance in the second test was found to be significantly greater than that of the third, there was no detectable difference between performances in the first and third tests or between the first and second tests. In the experimental group, performance in the first test was significantly lower than the performances in the second and third tests (which were indistinguishable from one another).

[FIGURE 4 NEAR HERE]

#### **Discussion**

## The experimental group outperforms the control group

The fact that the experimental group improved in their ability to identify and correct errors as well as produce correct forms associated with plurality is testament to the positive influence that the explicit contrastive input had on learners' performance. The experimental group's superior performance can be attributed to the noticing element of the treatment. The cross-linguistic instruction which made the targeted grammatical features salient proved to be more effective (for the identification and correction of articles and plurals and for both identification-correction and production of plurals) than non-cross-linguistic instruction.

## The significant effect of university

A significant difference was found to exist between the two universities for all four dependent variables. This naturally gives rise to the question as to why this might be. There are perhaps two possible reasons for this. The first is that the overall English ability in University 2 was generally of a higher level. This may be partially attributable to the fact that its participants specialised in International Studies which places a stronger emphasis on foreign language learning. It may also be partially due to the way in which the classes were organised in terms of ability at both universities: It may be especially pertinent that those in University 2 were streamed in accordance with their TOEIC (Test of English for International Communication) scores. (Those in University 1 were placed in English classes merely on the basis of the subject in which they had specialised.) That said, it should be noted that there is some contention as to how well scores in such language proficiency tests represent communicative ability.

Notwithstanding the putative partial explanations just given, perhaps the main contributing factor to the observed differences in performance between the two universities is the fact that the classes in University 1 met only once a week, whereas those in University 2 met twice a week. This effectively means that, throughout the duration of the experimental period, those in University 2 were exposed to double the treatment when compared with those of University 1. We explore this issue further in the next section which deals with improvement in production of articles.

## Lack of improvement in article production

The most pertinent question to emerge is why there was no significant difference between the control and experimental groups in production of articles when there was a highly significant difference in the identification-correction of articles. The interviews suggested that it is not only the omission of articles that was problematic but also distinguishing between them. This could be attributed to the English article system not consisting of one-to-one form and meaning relationships (Butler 2002), as well as to the fact that article distinction is generally considered a deeply complex issue (Andersen 1984). Even those learners who have studied English for a considerable length of time still typically experience difficulty in discriminating how to use articles properly (Kharma 1981; Yamada and Matsuura 1982).

Over the three tests, a sizeable and highly significant improvement was recorded in production of articles in the experimental group but not in the control group. The absence of a significant main effect of treatment is a trivial finding attributable to the fact that the experimental group's average performance in the first test was approximately one quarter of that seen in the control group.

# The possible role of katakana loanwords

Perhaps the most unexpected finding from our data on the identification-correction of plurals is the fact that the control group scored significantly higher in the third test compared to the first and second. In an attempt to ascertain the reason for this, the plural components of all three tests first need to be identified and examined.

One of the marked features of the first two tests is that some of their countable nouns are already part of the Japanese katakana lexicon of foreign import words. *Katakana* refers to one of the three syllabic scripts of Japanese, and is most frequently used for the transcription of imported foreign words other than those from Chinese. The particular nouns used in the two tests could be used in katakana as an alternative to corresponding Japanese-derived equivalents within the given context in which they appeared. This mapping is indicated in Table 1.

#### [TABLE 1 NEAR HERE]

Previous research has suggested that katakana English words often help Japanese learners to acquire English vocabulary (Daulton 1998). Nation (1990) stated that such cognates can help to lighten the learning burden which could be useful in assisting the rapid acquisition of related English basewords. Conversely, others have regarded katakana English to be a hindrance, not only due to its obvious lack of phonological similarities (Kay 1995), but also, and in particular, because of the semantic changes such words frequently undergo which, in turn, create the potential for being inappropriately applied within certain contexts (Sheperd 1995; Yamazaki 1997).

However, what seems to be more important with regard to countable nouns is the degree to which the learners were able to accommodate L2 syntax into those items which contain both a lexical and contextual overlap between L1 and L2. Since most nouns in Japanese do not require a distinction to be drawn between countable and uncountable nouns, it would seem logical to apply the same basis of rule to loanwords, even when they require plural endings in the original language from which they are derived. Thus, to say 'He likes listening to CD' (which is a sentence used in the second test) would be entirely natural in Japanese. While it is difficult to assume with any degree of certainty that L1 transfer is implicated here, it is possible that if, such transfer were occurring, it would be stronger in cases that incorporate katakana English words rather than those formed from Japanese-derived equivalents. In other words, contextually-compatible imported English nouns may be more resistant to syntactic change compared with those that possess corresponding Japanese equivalents only.

From the pattern of results, this increased resistance of imported English nouns to syntactic change would indeed appear to be evident. The control group's lowest performance scores were observed in the second test which contained the highest amount of katakana English words. This phenomenon could also explain why the performance in the third test was significantly better as it contained no such katakana words that could be applied appropriately within the given context. Furthermore, it could also account for why the scores across the three tests for articles were virtually identical (Figure 1). Since the use of articles in Japanese is not required, it would seem logical to suggest that a classification of countable nouns based on whether or not they stem from contextually-compatible katakana loanwords would exert more of an influence on the production of plurals than on the production of articles.

## Reduced improvement in the production of plurals in the third test

The significant difference found to exist between the control and experimental groups in the production of plurals suggests that the intervention helped to increase correct instances of plural production. However, the fact that the post hoc results indicated a poorer performance for both groups in the third test deserves further examination. In doing so, it is again necessary to return to the tests and to examine the content of their production sections. The pictures selected for the three tests (used for the basis of composing the descriptive

paragraphs) necessitated the production of plurals for *fruit, animals* and *furniture* respectively. As with the identification issues mentioned above for countable nouns, it is possible that the role of katakana loanwords may also be implicated in the production of plurals.

It is interesting to note that katakana English words are frequently characterised by a semantic narrowing which means that their usage becomes more contextually-bound than that of the original English (Honna 1995). In this instance, English words associated with fruit and animals are occasionally used in Japanese but they generally tend not to refer directly to the corresponding nominal objects themselves. Rather, they take on more restricted meanings such as flavour in the case of fruit (e.g. strawberry milkshake: used in Japanese as ストロベ リー・ミルクセーキ; apple pie: used in Japanese as アップルパイ) or cartoon characters for animals (e.g. *Mickey Mouse*: used in Japanese as  $\exists y \ne \neg \forall \neg \exists \exists Spider-Man$ : used in Japanese as and スパイダーマン). The case of *furniture*, however, is quite different. Most direct nominal reference to items of furniture in Japanese utilise English loanwords such as bed, sofa and lamp, all of which were depicted in the picture used in the third test. If any degree of L1 transfer were to exist, it is therefore possible that these words could have a stronger degree of influence compared with words that have no katakana equivalent. (This postulate is similar to that made for the case of identification-correction of plurals.) While this is still very much a tentative suggestion, words that have dual usage in both L1 and L2 may require a greater degree of cross-linguistic awareness-raising to evoke correct L2 usage.

We hasten to add that, although the presence of loanwords seemed to have exerted a negative impact on plural marking, we are well aware of the many positive influences of loanword use on foreign-language performance (Daulton 1998; Ringbom 2007). A number of studies have demonstrated the benefits that loanwords can have on EFL Japanese learners, especially in terms of lexical-level comprehension and production (e.g. Yoshida 1978; Brown and Williams 1985). Admittedly, pronunciation is an area of language performance that has been shown to be negatively affected (Yoshida 1978). The double-edged influence of loanwords is evident from the fact that both theoretical and empirical studies have highlighted how loanword use may often have different effects on different aspects of EFL performance. In all likelihood, the presence of loanwords will also have different effects on

beginners versus advanced learners, just as their presence will influence the learning of morphosyntactic items differently to the learning of lexical items.

#### **Conclusion**

This research provides clear empirical evidence for the potential usefulness of learners' mother tongues in foreign-language learning. However modest this evidence may be, it is nevertheless amongst only very few of its kind and we hope that it may stimulate further such studies which will continue to assess the strengths and limitations of an approach which focuses on cross-linguistic awareness-raising practices in various contexts. Our project is a response to Scott and de la Fuente's call (2008) for a pedagogical approach that empirically supports the use of the L1 for explicit learning of L2 forms. In our study, improvement in students' targeted EFL features resulted after learners' conscious explicit exposure to cross-linguistic similarities and differences. We believe that it is entirely likely that our findings are not restricted to Japanese EFL learners and, indeed, that they are generalizable to other EFL groups which are characterised by homogeneous L1 learner populations.

#### References

- Alderson, J. C., & Wall, D. (1993). Does washback exist? Applied Linguistics, 14, 115-129.
- Andersen, R. W. (1984). The one to one principle of interlanguage construction. Language Learning, 34(4), 77-95.
- Atkinson, D. (1987). The mother tongue in the classroom: a neglected resource? ELT Journal, 41(4), 241-247.
- Atkinson, D. (1993). Teaching in the target language: A problem in the current orthodoxy. Language Learning Journal, 8(1), 2-5.
- Auerbach, E. R. (1993). Reexamining English only in the ESL classroom. TESOL Quarterly, 27(1), 9-32.
- Ball, J., & Bernhardt, B. M. H. (2012). Standard English as a second dialect: a Canadian perspective. In A. Yiakoumetti (Ed.), Harnessing Linguistic Variation to Improve Education (pp. 189-225). Oxford: Peter Lang.

- Battisti, M., Campbell, M., Friesen, J., & Krauth, B. (2011). Non-standard English dialects and the effect of supplementary funding on educational achievement. Canadian Journal of Speech-Language Pathology and Audiology, 35(2), 190-197.
- Benson, C. (2004). Trilingualism in Guinea-Bissau and the question of instructional language. In C. Hoffmann & J. Ytsma (Eds.), Trilingualism in Family, School, and Community (pp. 166-184). Clevedon: Multilingual Matters.
- Benson, C., & Kosonen, K. (2013). Language Issues in Comparative Education: Inclusive Teaching and Learning in Non-dominant Languages and Cultures. Rotterdam: Sense Publishers.
- Benson, C. J. (1994). Teaching Beginning Literacy in the "Mother Tongue": A Study of the Experimental Crioulo/Portuguese Primary Project in Guinea-Bissau., Ph.D. Dissertation, University of California, Los Angeles.
- Brooks-Lewis, K. A. (2009). Adult learners' perceptions of the incorporation of their L1 in foreign language teaching and learning. Applied Linguistics, 30(2), 216-235.
- Brown, J. B., & Williams, C. J. (1985). Gairaigo: a latent English vocabulary base? Tohoku Gakuin University Review: Essays and Studies in English Eibungaku, 76, 129-146.
- Butler, Y. G. (2002). Second Language Learners' Theories on the Use of English Articles: An Analysis of the Metalinguistic Knowledge Used by Japanese Students in Acquiring the English Article System. Studies in Second Language Acquisition, 24(3), 451-480.
- Butler, Y. G. (2007). Foreign language education at elementary schools in Japan: searching for solutions amidst growing diversification. Current Issues in Language Planning, 8(2), 129-147.
- Butler, Y. G., & Iino, M. (2005). Current Japanese reforms in English language education: the 2003 'Action Plan'. Language Policy, 4(1), 25-45.
- Butzkamm, W. (1998). Code-switching in a bilingual history lesson: The mother tongue as a conversational lubricant. International Journal of Bilingual Education and Bilingualism, 1(2), 81-99.
- Butzkamm, W. (2003). We only learn language once. The role of the mother tongue in FL classrooms: death of a dogma. Language Learning Journal, 28(1), 29-39.
- Canagarajah, S., Kafle, M., & Matsumoto, Y. (2012). World Englishes in Local Classrooms. In A. Yiakoumetti (Ed.), Harnessing Linguistic Variation to Improve Education (pp. 77-96). Bern: Peter Lang.

- Carson, E., & Kashihara, H. (2012). Using the L1 in the L2 classroom: the students speak. The Language Teacher, 36(4), 41-48.
- Chalmers, H. (in press). First-Language Mediated Strategies for Improving Linguistic

  Proficiency and Academic Attainment for Bilingual Children Aged 4-11 in Nonbilingual Schools: A Systematic Review: Campbell Collaboration.
- Cook, V. (2001). Using the first language in the classroom. Canadian Modern Language Review, 57(3), 402-423.
- Cook, V. J. (1992). Evidence for multicompetence. Language Learning, 42(4), 557-591.
- Copland, F., & Neokleous, G. (2011). L1 to teach L2: complexities and contradictions. ELT Journal, 65(3), 270-280. doi: 10.1093/elt/ccq047
- Craven, L. (2012). An investigation of attitudes towards mother tongue usage in junior high school oral communication classes. Tama University Global Studies Faculty Bulletin, 4(3), 1-9.
- Creese, A., & Blackledge, A. (2010). Translanguaging in the bilingual classroom: a pedagogy for learning and teaching? Modern Language Journal, 94(1), 103-115.
- Critchley, M. P. (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.
- Cummins, J. (2009). Multilingualism in the English-language classroom: pedagogical considerations. TESOL Quarterly, 43(2), 317-321.
- Daulton, F. E. (1998). Japanese loanword cognates and the acquisition of English vocabulary. The Language Teacher, 22(1), 17-26.
- De la Campa, J. C., & Nassaji, H. (2009). The amount, purpose, and reasons for using L1 in L2 classrooms. Foreign Language Annals, 42(4), 742-759.
- Deignan, A., Gabryś, D., & Solska, A. (1997). Teaching English metaphors using cross-linguistic awareness-raising activities. ELT Journal, 51(4), 352-360.
- Ford, K. (2009). Principles and practices of L1/L2 use in the Japanese university EFL classroom. JALT Journal, 31(1), 63-80.
- Fujita-Round, S., & Maher, J. (2008). Language education policy in Japan. In S. May & N.H. Hornberger (Eds.), Encyclopedia of Language and Education (2nd edition, vol. 1) (pp. 383-392). New York: Springer.
- García, O. (2009). Bilingual Education in the 21st Century: A Global Perspective. Oxford: Wiley-Blackwell.
- García, O., Flores, N., & Woodley, H. H. (2012). Transgressing monolingualism and bilingual dualities: translanguaging pedagogies. In A. Yiakoumetti (Ed.),

- Harnessing Linguistic Variation to Improve Education (pp. 45-75). Oxford: Peter Lang.
- García, O., & Hesson, S. (2015). Translanguaging frameworks for teachers: macro and micro perspectives. In A. Yiakoumetti (Ed.), Multilingualism and Language in Education: Sociolinguistic and Pedagogical Perspectives from Commonwealth Countries (pp. 221-241). Peterborough: Cambridge University Press.
- García, O., Skutnabb-Kangas, T., & Torres-Guzmán, M. (2006). Imagining Multilingual Schools: Languages in Education and Glocalization. Clevedon: Multilingual Matters.
- García, O., & Wei, L. (2014). Translanguaging: Language, Bilingualism and Education.

  London: Palgrave Macmillan.
- Hall, G., & Cook, G. (2012). Own-language use in language teaching and learning. Language Teaching, 45(3), 271-308.
- Harbord, J. (1992). The use of the mother tongue in the classroom. ELT Journal, 46(4), 350-355.
- Hashimoto, K. (2009). Cultivating "Japanese who can use English": problems and contradictions in government policy. Asian Studies Review, 33(1), 21-42.
- Hashimoto, K. (2011). Compulsory 'foreign language activities' in Japanese primary schools. Current Issues in Language Planning, 12(2), 167-184.
- Hato, Y. (2005). Problems in top-down goal setting in second language education: a case study of the "Action Plan to cultivate 'Japanese with English abilities". JALT Journal, 27(1), 33-52.
- Honna, N. (1995). English in Japanese society: language within language. Journal of Multilingual & Multicultural Development, 16(1-2), 45-62.
- Hornberger, N. H., & Link, H. (2012). Translanguaging and transnational literacies in multilingual classrooms: a biliteracy lens. International Journal of Bilingual Education and Bilingualism, 15(3), 261-278.
- Horst, M., White, J., & Bell, P. (2010). First and second language knowledge in the language classroom. International Journal of Bilingualism, 14(3), 331-349.
- Iwasaki, N., Vinson, D. P., & Vigliocco, G. (2010). Does the grammatical count/mass distinction affect semantic representations? Evidence from experiments in English and Japanese. Language and Cognitive Processes, 25(2), 189-223.

- Izumi, E., Uchimoto, K., Saiga, T., Supnithi, T., & Isahara, H. (2003). Automatic error detection in the Japanese learners' English spoken data. Paper presented at the 41st Annual Meeting of the Association for Computational Linguistics, Sapporo, Japan.
- James, C. (1994). Don't shoot my dodo: On the resilience of contrastive and error analysis. IRAL. International Review of Applied Linguistics in Language Teaching, 32(3), 179-200.
- James, C. (1996). A cross-linguistic approach to language awareness. Language Awareness, 5(3-4), 138-148.
- Jarvis, S. (2015). Influences of previously learned languages on the learning and use of additional languages. In M. Juan-Garau and J. Salazar-Noguera (Eds), Contentbased Language Learning in Multilingual Educational Environments (pp. 69-86). Berlin: Springer.
- Kawai, A., Sugihara, K., & Sugie, N. (1984). ASPEC-I: An error detection system for English composition. IPSJ Journal (in Japanese), 25(6), 1072-1079.
- Kay, G. (1995). English loanwords in Japanese. World Englishes, 14(1), 67-76.
- Kharma, N. (1981). Analysis of the errors committed by Arab university students in the use of the English definite/indefinite articles. International Review of Applied Linguistics in Language Teaching, 19(4), 333-345.
- Kobayashi, T. (2008). Usage of countable and uncountable nouns by Japanese learners of English: two studies using the ICLE error-tagged Japanese sub-corpus. National Institute of Informatics Scholarly and Academic Information Navigator, 816(10), 73-82.
- Koizumi, M. (1998). Some Observations on Japanese Senior High School Learners. Journal of Japan-Korea Association of Applied Linguistics, 1(1), 73-88.
- Kubota, R. (2002). The impact of globalization on language teaching in Japan. In D. Block & D. Cameron (Eds.), Globalization and Language Teaching (pp. 13-28). London: Routledge.
- Kupferberg, I. (1999). The cognitive turn of contrastive analysis: empirical evidence. Language Awareness, 8(3&4), 210-222.
- Kupferborg, I., & Olshtain, E. (1996). Explicit contrastive instruction facilitates the acquisition of difficult L2 forms. Language Awareness, 5(3-4), 149-165.
- Laufer, B., & Girsai, N. (2008). Form-focused Instruction in Second Language Vocabulary Learning: A Case for Contrastive Analysis and Translation. Applied Linguistics, 29(4), 694-716. doi: 10.1093/applin/amn018

- Littlewood, W., & Yu, B. (2011). First language and target language in the foreign language classroom. Language Teaching, 44(1), 64-77.
- Lugo-Neris, M. J., Jackson, C. W., & Goldstein, H. (2010). Facilitating vocabulary acquisition of young English language learners. Language, Speech, and Hearing Services in Schools, 41, 314-327.
- Malcolm, I. G., & Truscott, A. (2012). English without shame: two-way Aboriginal classrooms in Australia. In A. Yiakoumetti (Ed.), Harnessing Linguistic Variation to Improve Education (pp. 227-258). Bern: Peter Lang.
- Masataka, K. (2006). Professionalism in English language education in Japan. English Language Teacher Education and Development, 9, 55-62.
- MEXT. (2002). Developing a strategic plan to cultivate 'Japanese With English Abilities': plan to improve English and Japanese abilities Retrieved 2 July 2013, from http://www.mext.go.jp/english/news/2002/07/020901.htm/
- MEXT. (2009). Eigo kyoiku kaikaku sogo puran (English language education reform plan)

  Retrieved 2 July 2013, from

  http://www.mext.go.jp/a\_menu/hyouka/kekka/08100105/022.htm/
- MEXT. (2010). Gaikokugo shido joshu (ALT) no koyo/keiyaku keitai ni kansuru chosa ni tsuite (Hiring and contractual agreements with Assistant Language Teachers)

  Retrieved 2 July 2013, from

  http://www.mext.go.jp/a\_menu/kokusai/gaikokugo/1295843.htm/
- Mondejar, M., Laurier, J., Valdivia, L., Mboutsiadis, B., & Sanchez, E. (2012). Language policy in Japan: shifting paradigms. In K. Bradford-Watts, R. Chartrand & E. Skier (Eds.), The 2011 Pan-SIG Conference Proceedings (pp. 149-165). Matsumoto: JALT.
- Nagata, R., Morihiro, K., Kawai, A., & Isu, N. (2006). A feedback-augmented method for detecting errors in the writing of learners of English. Paper presented at the 21st International Conference on Computational Linguistics and the 44th Annual Meeting of the Association for Computational Linguistics, Sydney.
- Nakata, Y. (2010). Improving the classroom language proficiency of non-native teachers of English: what and how? RELC Journal, 41(1), 76-90.
- Nation, I. S. P. (1990). Teaching and Learning vocabulary. Boston: Heinle & Heinle Publishers.
- Nishino, T., & Watanabe, M. (2008). Communication-oriented policies versus classroom realities in Japan. TESOL Quarterly, 42(1), 133-138.

- Ohtani, C. (2010). Problems in the assistant language teacher system and English activity in Japanese public elementary schools. Educational Perspectives, 43(1-2), 38-45.
- Riches, C., & Genesee, F. (2006). Literacy: crosslinguistic and crossmodal issues. In F. Genesee, K. Lindholm-Leary, W. Saunders & D. Christian (Eds.), Educating English Language Learners: A Synthesis of Research Evidence (pp. 64-108). New York: Cambridge University Press.
- Ringbom, H. (2007). Cross-linguistic Similarity in Foreign Language Learning. Clevedon: Multilingual Matters.
- Rivers, D. J. (2011). Politics without pedagogy: questioning linguistic exclusion. ELT Journal, 65(2), 103-113.
- Sakamoto, M. (2012). Moving towards effective English language teaching in Japan: issues and challenges. Journal of Multilingual and Multicultural Development, 33(4), 409-420.
- Sasaki, M. (2008). The 150-year history of English language assessment in Japanese education. Language Testing, 25(1), 63-83.
- Schneer, D., Ramanathan, V., & Morgan, B. (2007). (Inter)nationalism and English textbooks endorsed by the Ministry of Education in Japan. TESOL Quarterly, 41(3), 600-607.
- Scott, V. M., & de la Fuente, M. J. (2008). What's the problem? L2 learners' use of the L1 during consciousness-raising, form-focused tasks. The Modern Language Journal, 92(1), 100-113.
- Seargeant, P. (2009). The idea of English in Japan: ideology and the evolution of a global language. Bristol: Multilingual Matters.
- Sheen, R. (1996). The Advantage of Exploiting Contrastive Analysis in Teaching and Learning a Foreign Language. IRAL. International Review of Applied Linguistics in Language Teaching, 34(3), 183-197.
- Sheperd, J. (1995). Loanwords: a pitfall for all students. Faculty Journal of Aichi Gakuin Junior College, 3, March 1995.
- Siegel, J. (2012). Educational approaches for speakers of pidgin and creole languages. In A. Yiakoumetti (Ed.), Harnessing Linguistic Variation to Improve Education (pp. 259-292). Oxford: Peter Lang.
- Sullivan, N., & Schatz, R. T. (2009). Effects of Japanese national identification on attitudes toward learning English and self-assessed English proficiency. International Journal of Intercultural Relations, 33, 486-497.

- Underwood, P. R. (2010). A comparative analysis of MEXT English reading textbooks and Japan's National Center Test. RELC Journal, 41(2), 165-182.
- Vizmuller-Zocco, J. (1990). Contrastive Analysis in Italian Language Pedagogy. Italica, 67(4), 466-478.
- Yamada, J., & Matsuura, N. (1982). The use of the English article among Japanese students. RELC Journal, 13(1), 50-63.
- Yamazaki, T. (1997). Lack of awareness by Japanese university students of the inferences of Japanese English. Journal of the Faculty of Education, Shinshu University, 90, 41-50.
- Yiakoumetti, A. (2006). A bidialectal programme for the learning of standard modern Greek in Cyprus. Applied Linguistics, 27(2), 295-317.
- Yiakoumetti, A. (2007). Choice of classroom language in bidialectal communities: to include or to exclude the dialect? Cambridge Journal of Education, 37(1), 51-66.
- Yiakoumetti, A. (2012). Harnessing Linguistic Variation to Improve Education. Bern: Peter Lang.
- Yiakoumetti, A. (2015). Multilingualism and Language in Education: Sociolinguistic and Pedagogical Perspectives from Commonwealth Countries. Peterborough:

  Cambridge University Press.
- Yoon, K. K. (1993). Challenging prototype description: perceptions of noun countability and indefinite vs. zero. International Review of Applied Linguistics in Language Teaching, 31(4), 269-289.
- Yoshida, M. (1978). The acquisition of English vocabulary by a Japanese-speaking child. In E. M. Hatch (Ed.), Second Language Acquisition (pp. 91-100). New York: Newbury House.

Table 1. Countable nouns incorporated in the tests for the identification-correction of plurals

Test 1	Test 2	Test 3
noodle†	CD‡	animal
Type	band†	cat
restaurant†	musician†	dog

<sup>†</sup> commonly used in favour of corresponding Japanese-derived equivalent within the given context

<sup>‡</sup> used exclusively as an import word with no corresponding Japanese-derived equivalent

Figure 1: Mean percentage of the identification-correction of articles in the control and experimental groups. Note that, in test 1, no student in the control group of University 1 successfully identified-corrected any of the targeted articles. Error bars indicate 95% confidence interval of the mean.

Figure 2: Mean percentage of the production of articles of the control and experimental groups. Error bars indicate 95% confidence interval of the mean.

Figure 3: Mean percentage of the identification-correction of plurals of the control and experimental groups. Error bars indicate 95% confidence interval of the mean.

Figure 4: Mean percentage of the production of plurals of the control and experimental groups. Note that, in test 1, no student in the control group of University 1 successfully produced any of the targeted plurals. Error bars indicate 95% confidence interval of the mean.