Abstract
Fluency development is an essential component of language learning. The present study focuses on a timed writing activity designed to encourage language learners to produce more fluent and meaningful written texts. It explores the effect of topic-selection control on the writing fluency of 46 learners of English at a Japanese university. Control of topic selection alternated from teacher to learner during four writing sessions. Text analysis of each written production was done to determine a general fluency index, which was then statistically analyzed (t-test). Results indicated that topic-selection control did affect writing fluency, as texts written on self-selected topics displayed a significantly higher level of fluency than those written on assigned topics. This study also examines the effect of the writing activity on learners’ self-efficacy and attitude to second language (L2) writing. Pedagogical implications are discussed and suggestions for possible future L2 writing research are made.

Key words: EFL, writing, writing fluency, topic-selection control

1. Introduction
Writing is an important part of a balanced language learning course. However, many learners have come to see the texts they are asked to produce, not as forms of meaningful communication, but as “tests” of whether they have learned the grammar and vocabulary they have been taught (Homstad and Thorson, 2000). As a consequence, many learners take a minimalist approach to writing in order to produce as few mistakes as possible (Hyland, 2009; Perl, 1979; Rorschach, 1986; Sandler, 1987). This cautious approach results in writing that is not only much less grammatically and lexically complex, but is also reduced in quantity (Bonzo, 2008). This is problematic because not only is fluency an essential component of writing ability and development (Abdel Latif, 2013), learners are underutilizing their existing linguistic resources and are not sufficiently engaging in the risk taking and hypothesis testing that is necessary for language learning (Hyland, 2009).

This study focuses on a timed writing activity that addresses these problems by encouraging learners to produce more fluent and meaningful texts. The activity requires learners to write as much as possible within a set time on a topic chosen either by the teacher or by the individual learners. The present study aims to see if the findings of a recent study (Bonzo, 2008), which
found that texts written by intermediate learners of German as a foreign language on learner-selected topics during a series of timed writing activities exhibited significantly higher fluency than those on teacher-selected topics, can be replicated in a different context with a group of English language learners at a Japanese university. It also examines the effect of the writing activity on the learners’ self-efficacy and attitude to L2 writing, as these variables can also affect a learner’s approach to writing.

2. Approaches to L2 Learner Writing

Several researchers have engaged with the above problems with L2 learner writing. Hyland (2009) claims that, to begin with, an exclusive focus on formal features of texts is misplaced as there is little evidence that syntactic complexity or grammatical accuracy are the best measures of good writing. He argues that many learners can form syntactically accurate sentences, but cannot produce appropriate written texts. Moreover, Hyland states that while fewer errors could be considered an indication of progress, this may equally signal the learner’s aversion to taking risks and reaching beyond a current level of competence.

It has also been argued that content-focused rather than form-focused writing produces greater learner interest and more complex texts (Jones, 1982; Smith, 1994). Homstad and Thorson (2000) consider meaningful writing necessary for generating more complex and expressive writing from learners. On the other hand, Sternglass (1980) notes that when learners were given writing assignments they perceived as meaningless they used lower-level cognitive processing for language planning and production than they did for writing activities perceived to have stimulating goals. Bonzo (2008), citing Paris and Turner (1994), argues that a much sounder practice would be to ask learners to write about things that are most significant to them, enabling them to explore the language with less threat of correction. However, as Heilenman (1991) points out, such content-focused, meaning-creating writing has been noticeably absent from language learning classrooms.

In reviewing research on teacher feedback, Bonzo (2008) highlights the necessary place of errors, which can often be forgotten when there is too much focus on accuracy of forms. He cites Corder’s (1967) argument that errors made in learning an L2 are often the result of hypothesis-testing in the target language and commonly resemble those made by emergent first language (L1) learners. In a similar vein, Selinker (1972) claims that there is a bridge between the learner’s L1 and target language where they start using language, often differently to how a typical L1 speaker would, in an attempt to “try out” the language and its various meanings and uses, possibly leading to more free, more complex writing. Fathman and Whalley (1990) argue that writing assignments without feedback and teacher intervention should be valuable inclusions in an L2 curriculum, as they help increase writing fluency and may lead to learner improvement.

Nation (2001) argues that fluency development is one of the four strands of a balanced language course. He states that timed, continuous writing, where learners try to produce a large quantity of writing within a set time, is a useful fluency-development activity. To get the most out of the activity, Nation writes that the teacher should not correct errors, but comment on something
positive in the content of the writing.

Research supporting the above claims has been reported in several studies. Reichelt (2001) found that content-referenced teacher feedback was beneficial, while feedback focused only on grammatical errors was shown to have no positive effect. Semke (1984) observed that when content-only feedback was given total words written per task showed significant gains. However, any form or combination of content- or grammar-corrective feedback failed to benefit the learners' written accuracy. In the Japanese EFL context, Robb, Ross, and Shortreed (1986) found that the assumption that more correction results in greater accuracy was not convincingly demonstrated. Finally, Bonzo (2008) reported that content-focused feedback and self-selection of topics which allowed "learners the opportunity to explore topic and the complexities of the language without fear of retribution" (p. 731) appeared to lead to more complex writing. As discussed, Bonzo's study, carried out with intermediate-level English L1 learners of German as a foreign language, found that texts written on self-selected topics during a series of timed writing activities exhibited significantly higher fluency than those on teacher-selected topics.

3. Research questions

The current study explores whether similar results can be achieved in a different context in the writing of a group of intermediate-level Japanese learners of English. It examines the following research questions:

1. Does topic-selection control (teacher-selected topics versus student-selected topics) influence a participant's fluency in writing (as measured with a general fluency index)?
2. What effect does the activity have on learners' self-efficacy and attitude to L2 writing?

4. Method

4.1 Participants

The participants in this study were 46 (31 female, 15 male) Japanese learners of English between the ages of 17 and 20 years (M = 18.24). All were first-year students in a communicative English program at a Japanese university. In a placement test at the beginning of the program participants achieved the 46 highest scores and were placed into two classes according to their score. In this study these classes are referred to as Group 1 and Group 2. The overall gender imbalance was maintained in each group (Group 1: 16 female, 7 male; Group 2: 15 female 8 male). All participants consented in writing to participate in the study.

4.2 Writing Activity Procedure

In this study, two groups completed four ten-minute free writing activities in class, alternating each time between assigned and self-selected topics (Table 1).

In order to accustom participants to the activities, two practice sessions were held prior to the data collection stage, once using a self-selected topic and once using a teacher-selected topic. After the two practice sessions, each group completed one writing activity a week in normal class
time. The same teacher supervised all eight writing sessions.

At the beginning of each writing session the teacher repeated the purpose and procedures of the activity. Participants were encouraged to write as much as possible and advised not to be overly concerned about grammar or spelling. To further encourage the focus on fluency, participants were also told that their writing would not be used for assessment purposes. Participants were also encouraged not to erase or cross out anything they had written and were not allowed to consult reference materials such as dictionaries during the writing time.

Students' texts were collected immediately after each writing session. The texts were returned the following week with the total number of words (tokens) and the number of unique words (types) for each text and brief, content-related comments. To maintain the focus on fluency, no error correction or form-focused feedback was provided.

4.3 Data Analysis

To enable analysis of the texts by a computer-based analytic tool each handwritten text was converted to an electronic format using a word processing program. Each text was typed verbatim, except for instances where items generally accepted as one word had been written as two (for example, volley ball would be changed to volleyball). The total number of word tokens and types for each text was calculated using the Vocabprofile tool (Cobb). Once the number of tokens and types had been determined the general fluency index was calculated.

4.4 Calculation of Fluency

In this study, fluency is defined as a ratio of total different words occurring in an entry to the total words in the entry. However, as some researchers have pointed out (Bonzo, 2008; Wolfe-Quintero, Inagaki & Kim, 1998), such a ratio fails to discriminate between texts of different lengths when the ratios of unique to total words are the same. To counter this weakness a more sensitive type token ratio was suggested by Carroll (1967). This fluency index is the total number of different words divided by the square root of twice the total number of all words. Carroll’s index has subsequently been successfully used as a measure of fluency by Arthur (1979) and Bonzo (2008). On this basis it was adopted to calculate fluency in the present study.

4.5 Questionnaires

In order to address the second research question regarding the effect of the activity on

<table>
<thead>
<tr>
<th>Session</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Life after graduation</td>
<td>Self-selected</td>
</tr>
<tr>
<td>Two</td>
<td>Self-selected</td>
<td>Life after graduation</td>
</tr>
<tr>
<td>Three</td>
<td>Favorite classes/subjects</td>
<td>Self-selected</td>
</tr>
<tr>
<td>Four</td>
<td>Self-selected</td>
<td>Favorite classes/subjects</td>
</tr>
</tbody>
</table>
learners’ self-efficacy and attitude to L2 writing, pre- and post-activity questionnaires were administered. All 46 participants voluntarily completed the questionnaires. Data collected included information related to participants’ L2 learning experiences, writing habits, self-efficacy, and attitudes to writing in English. Items on self-efficacy and attitudes to writing asked participants to indicate their level of agreement or disagreement with a series of statements using a 6-point scale (1=strongly disagree, 2=disagree, 3=disagree a little, 4=agree a little, 5=agree, 6=strongly agree). To gauge the effects of the writing activities on self-efficacy and attitudes to writing, relevant items from the initial questionnaire were repeated in the post-activity questionnaire.

5. Results

5.1 Topic-selection Control and Writing Fluency

A paired-samples t-test for correlated samples was conducted to compare the fluency indexes of all 46 participants’ written productions in assigned and self-selected conditions. There was a statistically significant difference in the scores for assigned (M = 3.90) and self-selected (M = 4.09) conditions; t(45) = -4.24, p < 0.001. These results show that topic-selection control does have an effect on writing fluency. Specifically, the results indicate that when students write about topics they choose themselves, their writing fluency increases. Therefore, in answer to the first research question, which asked whether topic-selection control (teacher-selected topics versus student-selected topics) influences a participant’s fluency in writing, the results indicate that it does, with texts on self-selected topics demonstrating significantly higher fluency.

Furthermore, the general fluency index for each group, with the exception of session 1 for Group 2, was higher for texts written on self-selected topics for both groups, regardless of order of topic-control shifting (Table 2).

<table>
<thead>
<tr>
<th>Session</th>
<th>Condition</th>
<th>Group 1 Mean (SD)</th>
<th>Group 2 Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assigned</td>
<td>3.90 (.46)</td>
<td>3.88 (.42)</td>
</tr>
<tr>
<td>2</td>
<td>Self-selected</td>
<td>4.17 (.45)</td>
<td>3.71 (.41)</td>
</tr>
<tr>
<td>3</td>
<td>Assigned</td>
<td>3.94 (.44)</td>
<td>4.20 (.45)</td>
</tr>
<tr>
<td>4</td>
<td>Self-selected</td>
<td>4.12 (.42)</td>
<td>4.05 (.44)</td>
</tr>
</tbody>
</table>

There were slight differences in the overall fluency index scores of the two groups, with Group 1 scoring slightly higher overall scores than Group 2 for both assigned and self-selected topics (Table 3). This is most likely explained by Group 1 students being generally more proficient English users.


### TABLE 3

Overall Topic Control and Mean Fluency for Both Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Condition</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assigned</td>
<td>3.92 (.40)</td>
</tr>
<tr>
<td></td>
<td>Self-selected</td>
<td>4.15 (.41)</td>
</tr>
<tr>
<td>2</td>
<td>Assigned</td>
<td>3.88 (.43)</td>
</tr>
<tr>
<td></td>
<td>Self-selected</td>
<td>4.04 (.47)</td>
</tr>
</tbody>
</table>

5.2 The effects of the activity on learners’ self-efficacy and attitude to writing

As discussed, pre- and post-activity questionnaires were completed by all participants. Table 4 shows the pre- and post-activity mean scores for variables concerned with learner attitudes to L2 writing and self-efficacy. As discussed, a scale ranging from 1 (strongly disagree) to 6 (strongly agree) was used to elicit participants’ level of agreement or disagreement with a set of statements.

There was a strong sense of the importance of being able to write well in English, which increased after completing the writing activity (from $M = 4.78$ to $M = 5.11$). On the other hand, while recognising the importance of writing ability, participants’ self-efficacy was low and showed no significant increase as a result of doing the writing activity. However, the results indicated that participants’ enjoyment of writing in English increased, although, again, no statistically significant difference was detected ($p > .05$).

### TABLE 4

Pre- and Post-activity Mean Scores for Learner Attitudes and Self-efficacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre</th>
<th>Post$^*$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Writing in English is easy</td>
<td>2.61 (0.97)</td>
<td>2.59 (1.03)</td>
</tr>
<tr>
<td>2. Being able to write well in English is important</td>
<td>4.78 (1.00)</td>
<td>5.11 (1.20)</td>
</tr>
<tr>
<td>3. I can write well in English</td>
<td>2.67 (0.98)</td>
<td>2.70 (1.06)</td>
</tr>
<tr>
<td>4. I really enjoy writing in English</td>
<td>3.72 (1.03)</td>
<td>4.04 (1.10)</td>
</tr>
</tbody>
</table>

Note. *One participant responded with 1 (strongly disagree) to all items in the post-activity questionnaire.

Learner feedback on the writing activity itself was generally positive, with 41% of learners either agreeing (30%) or strongly agreeing (11%) with the statement “I enjoyed doing free writing in class” ($M = 4.15$) and a reasonably strong indication that the learners would like to do more writing in class ($M = 4.26$). However, as Table 5 also shows, participants were less sure that doing the writing activity improved either their English writing ($M = 3.76$) or speaking ($M = 3.5$) abilities.
### TABLE 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I enjoyed doing free writing in class</td>
<td>4.15 (1.16)</td>
</tr>
<tr>
<td>2. I can write English better because of doing free writing in class</td>
<td>3.76 (1.04)</td>
</tr>
<tr>
<td>3. I can speak English better because of doing free writing in class</td>
<td>3.50 (1.02)</td>
</tr>
<tr>
<td>4. I would like to do more writing in class in the future</td>
<td>4.26 (1.24)</td>
</tr>
</tbody>
</table>

### 6. Discussion

**6.1 Topic-selection control and writing fluency**

This study found that texts written on self-selected topics exhibited significantly higher fluency than those written on teacher-assigned topics. This was not unexpected as it concurs with previous relevant research (Bonzo, 2008; Paris & Turner, 1994). That similar results were found, despite the differences in sociocultural context and target language (Japanese EFL learners in the present study as opposed to American learners of German in Bonzo’s study) strongly suggests that the effects of topic-selection control on writing fluency are not context or language-specific.

When learners are given control over topic choice, they are able to write about something both more familiar and meaningful to them. This may lead to increased fluency as learners can perhaps more easily access the lexis they need to express themselves when writing about things they have previously spoken or thought deeply about. Aitchison (2012) discusses experiments which have supported "the notion that words are easily aroused in relation to topics one is thinking about" (p. 241) and how commonly used words are easier to find in the mental lexicon. Another possible explanation for more fluent writing on self-selected topics comes from Hoey’s (2005) theory of lexical priming, especially the property of *nesting*, and its role in collocation:

> We can only account for collocation if we assume that every word is mentally primed for collocational use. As a word is acquired through encounters with it in speech and writing, it becomes cumulatively loaded with the contexts and co-texts in which it is encountered, and our knowledge of it includes the fact that it co-occurs with certain other words in certain kinds of context. The same applies to word sequences built out of these words; these too become loaded with the contexts and co-texts in which they occur. I refer to this property as *nesting*, where the product of a priming becomes itself primed in ways that do not apply to the individual words making up the combination. Nesting *simplifies the memory’s task* [italics added]. (Hoey, 2005, p. 8)

If the processes discussed here do work as Aitchison and Hoey describe, then it is possible to see how self-selecting a topic under the stresses of a time-limited writing activity could result in more words being written. Although the assigned topics (*Life after graduation, Favorite classes/subjects*) were chosen because they were assumed to be easy topics to write about, they may not
have been as familiar or meaningful as topics the learners chose themselves.

Comparing the two most fluent and least fluent texts in this study lends support to the notion that collocational knowledge and use produces more fluent texts and that writing or speaking about self-selected topics can aid this. The text with the highest fluency index of 5.33 contained, for example, several different two- and three-word collocations in its 146 tokens (e.g. interesting story, and so on, a lot of, hold the button, two years ago, late at night, in the sky, the sound of, very angry, too loud). In this text, the learner wrote a story about a funny incident that occurred in her family two years before, one which she also talked about during a speaking assessment test. The text with the lowest fluency index (2.54) was written on an assigned topic (Life after graduation). In addition to containing far fewer tokens (34) this text also displays considerably less collocation use, with I want to being repeated 3 times and no use at all of the various types of collocations seen in the former text. For example, in this text, the adjective happy is used on its own in the statement My life will be happy, whereas the first text used adverb+adjective collocations on two occasions in addition to several other types of collocations. The freedom to write about something familiar and meaningful allowed the writer of the first text to use the linguistic resources she had developed through thinking about and possibly having told the story before. The same cannot be said for an assigned topic as there is no guarantee that learners will find it as familiar or meaningful as something they have thought about or experienced and thus had no impetus to develop the language needed to speak or write about it.

However, the finding that more fluent texts were written on self-selected topics than on assigned topics is just the beginning. As Bonzo (2008) points out, “[p]edagogical application requires that students do more than simply write higher counts of different words” (p. 730). Although not examined in this study, examples such as the two texts discussed above would seem to indicate a strong relationship between fluency and grammatical complexity. The presence of various phrases and collocations in the first text (in contrast to the much shorter and less complex second text) indicate that there would be a strong correlation between fluency and grammatical complexity. If it is the case that writing fluency is related to complexity, and control of topic selection influences the amount L2 learners write, then the pedagogical implication is that, in line with the recommendations of both Bonzo and Fathman & Whalley (1990), learners should at least occasionally be allowed to choose the topics they write about.

6.2 Learners’ self-efficacy and attitude to writing

Another component of this study related to the effect of the writing activity on participants’ self-efficacy and attitude to writing in English. It was seen that one positive aspect of the study was that learners’ enjoyment of writing in English increased. The data also revealed strong indications that the learners enjoyed doing the writing activity and would like to do more in-class writing in the future. On the other hand, participants were not so confident that doing the writing activity improved their English writing proficiency. This could be related to the short time period that the writing activity was used, as learners may have needed to do the activity for a longer period to notice any improvement in their writing abilities. In addition, learners might also have
wanted to receive some form-focused feedback on their writing in order to gauge their progress.

As discussed, to encourage a focus on meaning and fluency, feedback in this study was limited to content-related comments as well as fluency-related feedback in the form of the total number of words (tokens) and unique words (types) for each text. For learners accustomed to having their writing (and speaking) assessed mostly on grammatical accuracy and receiving corrective form-focused feedback this approach may have contributed to them feeling uncertain of any improvement in their writing. If after repeated writing assessments learners see a decline in the number of errors they are making, they might consider this a sign of improvement. However, as Hyland (2009) and others have argued, first, there is little evidence that grammatical accuracy is the best measure of good writing and, second, while fewer errors could be considered an indication of progress, this might equally signal the learner’s risk aversion and reluctance to reach beyond a current competency level.

7. Conclusion

This study found that texts written on self-selected topics in a series of timed writing activities exhibited significantly higher fluency than those written on teacher-assigned topics. As fluency development is an essential component of language learning (Abdel Latif, 2013; Nation, 2001), this result suggests that intermediate EFL learners should sometimes have control over the topics they write about.

In addition, the writing activity used in this study is easy to implement and takes up relatively little class time. However, this study has shown the potential benefits of the activity for developing learners’ writing fluency and enjoyment of writing. If used regularly for a longer time, additional benefits such as increases in complexity and self-efficacy may also become more apparent.

This study also found that overall learners did not feel that their writing ability had improved after doing the activity six times (including the two practice sessions). While the reasons for this are not known, the short time period and the type of feedback learners received on their writing are possible factors. As suggested above, using the activity over a longer time period could help learners feel a sense of progress, especially if they see their fluency increasing. However, as content-focused feedback is essential to maintaining the focus on fluency development, other types of meaningful writing activities, such as narratives or essays, would be more appropriate for giving meaning- and structure-focused feedback. It would also be very important to tell learners as explicitly as possible the differences between, and the benefits of, the different types of writing activities.

There are several limitations to this study which need to be acknowledged. The study analysed writing fluency only. No detailed analysis of lexical or syntactic complexity or accuracy, spelling or noncanonical word order was done. Future research might consider these aspects of writing under similar conditions. As learners wrote only four times due to time constraints the effects of the activity over a substantial time could not be examined. Carrying out a study over a longer time period, for example, over 10-15 weeks would be beneficial. Finally, the participants
in this study were all L1 Japanese users of a similar age and L2 competency, learning English as a foreign language at a university in Japan. To provide further evidence of the effects of topic control on writing fluency, it is essential to replicate this research with a variety of learners in different contexts, for example, in an ESL setting with a group of learners who do not share an L1 or with learners of languages other than English.

The findings of this study strongly suggest that there is a link between topic control and fluency. Therefore, to develop writing fluency learners should occasionally be given the freedom to choose the topics they write about. In addition to fluency development, learners should also find writing about self-selected topics more meaningful than topics which are assigned to them. This would have a positive effect on learner motivation and attitude to writing, which should lead to learners not only making better use of their existing linguistic resources, but also taking the risks necessary to developing their competencies beyond their current level.

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