ABSTRACT
Development of English as a Lingua Franca (ELF) is parallel to development of intercultural communicative competence. However, ethnocentrism is seen as a major obstacle in developing intercultural communication. Increasing intercultural experience is prescribed as a method for overcoming ethnocentrism. This paper reports on a study involving 49 Japanese ELF students who were enlisted to participate in a six-week digital pen pal exchange. Using a pretest-posttest experimental design, the effects of the exchange were quantified. Results of this study revealed both decreases in ethnocentricity and increases in intercultural confidence as a result of this six-week exchange. This study contributes to research into effective ELF practices and the use of technology to support intercultural development.

KEYWORDS: intercultural communication, intercultural sensitivity, ELF, CALL
fundamental change in the way we see the world through the ELF lens, comes the need for a fundamental change to the teaching practices used in support of ELF. Yet, there is still very little literature in regards to what actually constitutes effective ELF teaching practices. This study seeks to contribute to an understanding of ELF by investigating the effect of a digital pen pal exchange and its potential benefit in supporting the ELF paradigm.

2. LITERATURE REVIEW

ELF deals with the concept of global Englishes which distinguishes between “inner circle,” “outer circle,” and “expanding circle” English users (Kachru, 1992); however, ELF attempts to level the playing field in sociolinguistic terms. One of the challenges of any new movement within language learning pedagogy is in centralizing terms. The definition of ELF is no different. Rather than attempting my own definition, I will use that of one of its seminal proponents, Jennifer Jenkins (2009):

The vast majority of ELF researchers take a broad rather than narrow view, and include all English users within their definition of ELF. The crucial point, however, is that when Inner Circle speakers participate in ELF communication, they do not set the linguistic agenda. Instead, no matter which circle of use we come from, from an ELF perspective we all need to make adjustments to our local English variety for the benefit of our interlocutors when we take part in lingua franca English communication. ELF is thus a question, not of orientation to the norms of a particular group of English speakers, but of mutual negotiation involving efforts and adjustments from all parties. (p. 201)

So, in ELF all agents must cooperate in order to communicate. It is not surprising, then, that ELF is seen as “precursor and partner” to intercultural communication (Hüimbauer, Böhringer, & Seidlhofer, 2008), though this in some ways still leaves the notion that ELF could somehow precede intercultural communication. I might reverse this and argue that intercultural communication is precursor and partner to ELF. Michael Byram highlights this when he says “lingua franca use requires engagement with both familiar and unfamiliar experience through the medium of another language” (1997, p. 3). Therefore, use of a foreign language presupposes a desire to communicate interculturally. Therefore, at least affectively speaking, the seed of intercultural communication begins before the language for communication is even considered.

In studies of intercultural communication we find ethnocentrism to be a major and recurring theme. Indeed, ethnocentrism is seen as a major obstacle in developing intercultural communicative competence (Bennett, 1998). In a study conducted among university students in the United States it was concluded that ethnocentrism had a negative effect on intercultural willingness-to-communicate (Lin & Rancer, 2003). Within ethnically more homogeneous environments, ethnocentrism may be an even greater obstacle. For instance, in a study comparing Japanese university students with American university
students it was discovered that Japanese students had significantly higher levels of ethnocentrism (Neuliep, Chaudoir & McCroskey, 2001).

If ELF as a practice is affected by ethnocentrism, then we might expect to find the literature of ELF to reflect this connection. In fact, ELF literature is filled with language which highlights the ethnocentric or ethnorelativistic nature of the ELF discussion. Claims such as ELF helps students to “take control over” the development of English (Houghton, 2009, p. 78) suggests a war is taking place over the future of the English language. Others seem to react to these notions by reminding us that native speakers are still relevant to the ELF discussion (Carey, 2010). More recently the term “native speaker” itself has been rebuked for its unspoken prejudicial deference (Houghton & Rivers, 2013). What seems clear from this ongoing debate is that issues of ethnocentrism and discussion of ELF are intimately intertwined; and since ethnocentrism is a hindrance to developing intercultural communication, then overcoming ethnocentrism should be of pinnacle importance in an ELF program - perhaps even more so than language proficiency itself.

Dong, Day, and Collaço (2008) conducted a study among 419 university students in the United States on the issue of ethnocentrism and discovered a converse relationship between low levels of ethnocentrism and high levels of intercultural sensitivity. The authors concluded that teachers should focus on increasing intercultural sensitivity in order to overcome ethnocentrism. A connection between intercultural sensitivity and ethnocentrism was also identified in a separate study by Chen (2010).

Hammer, Bennett and Wiseman (2003) state that “as one’s experience of cultural difference becomes more complex and sophisticated, one’s potential competence in intercultural relations increases” (p. 423). This suggests that authentic encounters with different cultures can contribute to an increase in intercultural sensitivity. Pen pal programs provide one such avenue for authentic intercultural contact. In addition, pen pal programs promote learning and literacy. Studies have shown that exchanges between children and adults, for instance, allowed the children to develop their own letter writing through modeling (Yellin, 1987). Studies of intercultural pen pal exchanges from members of inner circle and outer circle groups have shown that participants can model each other and develop a shared library of vocabulary for the purpose of communication (Barksdale, Watson, & Park, 2007). Pen pal exchanges have also been used successfully between inner circle and expanding circle groups to develop both intercultural understanding and language development (Xing, 2014; Yang & Chen, 2014).

3. PURPOSE OF THIS STUDY

It was the purpose of this study to test the effectiveness of a digital pen pal program in developing intercultural communication. In doing so this study seeks to answer the following questions:

1. Can a digital pen pal exchange be an effective way of decreasing ethnocentrism?
2. In what ways will development of intercultural sensitivity affect potential competencies with ELF usage?
4. METHOD

4.1 Subjects
The subjects of this study were 49 Japanese university students at Tamagawa University’s Center for English as a Lingua Franca (CELF). The students ranged from 19-20 years of age. The CELF currently uses TOEIC IP scores as part of student assessment. The students in this study had an average TOEIC IP reading score of 111. This is comparable with CEFR level A2 which identifies them as basic users (ETS, 2013, p. 22). The total average TOEIC IP test scores for this group of students was 314. Educational Testing Services (ETS, 2013) describes subjects with this score as follows:

[Between 220-470] Can understand simple conversations when the other party speaks slowly and repeats or paraphrases what is said. Is capable of reporting on familiar topics. Knowledge of vocabulary, grammar, and structure is generally inadequate. However, if the other party is used to dealing with non-native speakers, the individual can manage to get the point across. (p. 23)

4.2 Instrument
Intercultural sensitivity in this study is measured using the Intercultural Sensitivity Scale (ISS) developed by Chen and Starosta (2000). The ISS is a 24-item questionnaire which measures the following affective concerns: (1) Interaction Engagement; (2) Respect for Cultural Differences; (3) Interaction Confidence; (4) Interaction Enjoyment; and (5) Interaction Attentiveness (See Appendix A). The ISS was shown to be “highly internally consistent” with an 86% reliability coefficient within its context of U.S. college students (Chen & Starosta, 2000, p. 11) and relatively consistent with similar and more widely used instruments (p. 12). The ISS has been used in other studies as well in the United States (Dong et al., 2008), Germany (Fritz, Mollenberg & Chen, 2001), and China (Peng, 2006). In preparing the ISS for this study, the questionnaire items were translated into Japanese by the author and a native Japanese speaker with extensive English experience (See Appendix B). The Japanese items were then put into digital questionnaire form for distribution. The questionnaire was given a 5-point Likert scale measurement for each item with Japanese responses equivalent to: (1) Strongly Disagree; (2) Disagree; (3) Neutral; (4) Agree, and (5) Strongly Agree.

4.3 Procedure
In order to test the effectiveness of the pen pal exchange on intercultural development, students were given the ISS both before and after the six-week exchange. Of the 49 students who participated in the exchange, 46 students completed the pretest, and 42 completed the posttest. The online version of the questionnaire was administered during class and students answered the questionnaire using their smartphones. Student identification was not collected with their responses.
4.4 Materials
For the pen pal exchange, I used an online program called PenPalSchools <https://penpalschools.com>, an online Learning Management System (LMS) style tool for teachers to manage pen pal exchanges over the internet. The LMS format allows both instructors of the participating groups to monitor the exchanges online through a simple interface. The exchange was centered on weekly editorial articles which both students were challenged to read and respond to. The editorials covered different topics each week such as: the environment; poverty; technology; war and conflict; government; and, culture. The articles were associated with question prompts which both exchange partners were encouraged to respond to. The intention was that discussion would be generated between the exchange partners on each of the weekly topics.

PenPalSchools offers both three-week and six-week exchanges. They also offer exchanges at the beginner, intermediate, and advanced level. The subjects of this study were enrolled in the beginner level due to their low reading comprehension level. This is in keeping with the practice of providing reading material which does not overwhelm the reader with new vocabulary in hopes of maintaining focus on the overall meaning of the passage (Harmer, 2001, p. 213-215). Due to unknown reasons, the students were not placed into the beginner level program which was initially selected, but instead placed into an advanced course. Students complained that they could not understand the passages, and so the key points of each week's readings were reviewed collectively during class.

The subjects of this study were paired with a group of American high school students. There were more Japanese university students in this pairing than American high school students; so some of the exchanges were between three member groups consisting of two Japanese students and one American student. In many cases the American student was unresponsive and did not participate in the exchange which may have affected the results of the study.

All of the Japanese students in this study were encouraged to continue reading the editorials and responding to the question prompts until the end of the six-week exchange despite any cases of unresponsiveness from their American counterparts. In terms of teacher involvement with the process of student writing, a case-by-case tutor role was taken. The instructor gave minimal correction, and only where the intended message seemed compromised. In other words, meaning was emphasised over form. The students were not graded on their writing, but rather participation in the exchange was rewarded with full points towards the writing component of the course which was 20% of the final grade.

4.5 Data Analysis
Pretest and posttest comparisons of the ISS questionnaire were examined using an unpaired two-tailed t-test to determine probability (p). Industry standards have long suggested a p-value below .05 is statistically significant, however opposition to this standard has been steadily growing (Nuzzo, 2014). Effect size is argued to be an equally important, if not a more important measurement to consider (Cummings, 2013). Effect size in this study is reported as a measure of Cohen’s d. The formula used to calculate Cohen’s d for this study can be found in Figure 1.
Figure 1

*Formula for calculating Cohen’s d as taken from Lakens (2013)*

\[
d_s = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{(n_1-1)SD_1^2 + (n_2-1)SD_2^2}}
\]

Results in this study report both p-values and effect size. Statistical significance is given to p-values below .05. Effect size (d) is interpreted where a value of 0.2 is considered a small effect, a value of 0.5 is considered a medium effect, and a value of 0.8 is considered a large effect (Cohen, 1988; Cummings, 2014). Results were calculated such that positive d-values indicated a positive effect while negative d-values indicated a negative effect.

5. RESULTS

Analysis of the pretest-posttest ISS yielded statistically significant results in two areas: a medium positive effect on the Interaction Engagement factor (d = 0.5); and a medium positive effect on the Interaction Confidence factor (d = 0.5).

Table 1

*Results of statistical analysis on the pre and post ISS (df = 83)*

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Pre/Post</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interaction Engagement</strong></td>
<td>Pre</td>
<td>3.51</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.71</td>
<td>0.43</td>
<td>2.17</td>
<td>0.04</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Respect for Cultural Differences</strong></td>
<td>Pre</td>
<td>3.65</td>
<td>0.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.45</td>
<td>0.57</td>
<td>-1.76</td>
<td>0.08</td>
<td>-0.4</td>
</tr>
<tr>
<td><strong>Interaction Confidence</strong></td>
<td>Pre</td>
<td>2.65</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.02</td>
<td>0.72</td>
<td>2.33</td>
<td>0.02</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Interaction Enjoyment</strong></td>
<td>Pre</td>
<td>3.52</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.39</td>
<td>0.91</td>
<td>-0.69</td>
<td>0.33</td>
<td>-0.2</td>
</tr>
<tr>
<td><strong>Interaction Attentiveness</strong></td>
<td>Pre</td>
<td>3.48</td>
<td>0.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.7</td>
<td>0.64</td>
<td>1.59</td>
<td>0.12</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Note: *Statistical significance present at the p < .05 level. Effect size is measured by Cohen’s d where a value of 0.2 is considered to be a small effect, a value of 0.5 is considered to be a medium effect, and a value of 0.8 is considered to be a large effect (Cohen, 1988). Positive d values indicate an increase in the attribute measured, while negative d values indicate a decrease in the attribute measured at the end of the 6-week exchange.

5.1 Medium Positive Effect on Interaction Engagement (d = 0.5)

Results showed a medium positive effect in the Interaction Engagement factor. Interaction Engagement was measured by items 1, 11, 13, 21, 22, 23, and 24 of the ISS questionnaire. Analysis of item 11 and item 24 yielded the most statistically significant results.
### Table 2
**Detailed results of statistically significant changes to the interaction engagement factor**

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre/Post</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I enjoy interacting with people from different cultures.</td>
<td>Pre</td>
<td>4.00</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>4.24</td>
<td>0.91</td>
<td>1.27</td>
<td>.21</td>
<td>0.3</td>
</tr>
<tr>
<td>11. I tend to wait before forming an impression of culturally-distinct counterparts.</td>
<td>Pre</td>
<td>3.13</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.67</td>
<td>0.69</td>
<td>3.37</td>
<td>.001</td>
<td>0.7</td>
</tr>
<tr>
<td>13. I am open-minded to people from different cultures.</td>
<td>Pre</td>
<td>3.74</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>4.02</td>
<td>0.90</td>
<td>1.44</td>
<td>.15</td>
<td>0.3</td>
</tr>
<tr>
<td>21. I often give positive responses to my culturally different counterpart during our interaction.</td>
<td>Pre</td>
<td>3.39</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.50</td>
<td>0.89</td>
<td>0.59</td>
<td>.56</td>
<td>0.1</td>
</tr>
<tr>
<td>22. I avoid those situations where I will have to deal with culturally-distinct persons.*</td>
<td>Pre</td>
<td>2.65</td>
<td>0.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>2.57</td>
<td>0.70</td>
<td>-0.56</td>
<td>.58</td>
<td>-0.1</td>
</tr>
<tr>
<td>23. I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues.</td>
<td>Pre</td>
<td>3.78</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.64</td>
<td>0.88</td>
<td>-0.76</td>
<td>.45</td>
<td>-0.2</td>
</tr>
<tr>
<td>24. I have a feeling of enjoyment towards differences between my culturally distinct counterpart and me.</td>
<td>Pre</td>
<td>3.87</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>4.31</td>
<td>0.72</td>
<td>2.32</td>
<td>.02</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Note: *Items are reverse coded.

#### 5.2 Medium Positive Effect on Interaction Confidence (d = 0.5)
Results showed a medium positive effect in the Interaction Confidence factor. Interaction Confidence was measured by items 3, 4, 5, 6, and 10 of the ISS questionnaire. Analysis of item 5 and item 6 yielded the most statistically significant results.

### Table 3
**Detailed results of statistically significant changes to the interaction confidence factor**

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre/Post</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. I am pretty sure of myself in interacting with people from different cultures.</td>
<td>Pre</td>
<td>3.00</td>
<td>1.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.33</td>
<td>1.00</td>
<td>1.53</td>
<td>.13</td>
<td>0.3</td>
</tr>
<tr>
<td>4. I find it very hard to talk in front of people from different cultures.*</td>
<td>Pre</td>
<td>2.32</td>
<td>1.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>2.36</td>
<td>0.98</td>
<td>0.17</td>
<td>.86</td>
<td>0.0</td>
</tr>
<tr>
<td>5. I always know what to say when interacting with people from different cultures.</td>
<td>Pre</td>
<td>2.26</td>
<td>1.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.05</td>
<td>1.10</td>
<td>3.43</td>
<td>.001</td>
<td>0.7</td>
</tr>
<tr>
<td>6. I can be as sociable as I want to be when interacting with people from different cultures.</td>
<td>Pre</td>
<td>2.87</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.43</td>
<td>1.02</td>
<td>2.54</td>
<td>.01</td>
<td>0.5</td>
</tr>
<tr>
<td>10. I feel confident when interacting with people from different cultures.</td>
<td>Pre</td>
<td>2.78</td>
<td>1.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>2.95</td>
<td>1.15</td>
<td>0.68</td>
<td>.50</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Note: *Items are reverse coded.
5.3 Other Notable Results
There were a few other question items which showed statistical significance: item 12 from the Interaction Enjoyment subscale; item 18 from the Respect for Cultural Differences subscale; and item 19 from the Interaction Attentiveness subscale.

Table 4
Other notable results from detailed analysis of ISS items

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre/Post</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. I often get discouraged when I am with people from different cultures.*</td>
<td>Pre</td>
<td>3.87</td>
<td>1.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.27</td>
<td>1.14</td>
<td>-2.51</td>
<td>.01</td>
<td>-0.5</td>
</tr>
<tr>
<td>18. I would not accept the opinions of people from different cultures.*</td>
<td>Pre</td>
<td>4.30</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.38</td>
<td>1.34</td>
<td>-4.07</td>
<td>&lt; .001</td>
<td>-0.9</td>
</tr>
<tr>
<td>19. I am sensitive to my culturally-distinct counterpart’s subtle meanings during our interaction.</td>
<td>Pre</td>
<td>2.83</td>
<td>1.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>3.21</td>
<td>0.78</td>
<td>1.97</td>
<td>.05</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Note: *Items are reverse coded.

6. DISCUSSION

6.1 Reduction in Ethnocentrism
Participants experienced a medium positive effect in the Interaction Engagement factor of the ISS (d = 0.5). Item 11, “I tend to wait before forming an impression of culturally-distinct counterparts,” scored a notable increase (d = 0.7), as did item 25, “I have a feeling of enjoyment towards differences between my culturally distinct counterpart and me,” (d = 0.5). Both of these would indicate they were able develop a more complex understanding of cultural differences which gave them both greater wisdom in knowing that first impressions are not always correct, and that discovering cultural differences can be a source of enjoyment. This suggests a reduction in ethnocentric tendencies. Indeed, this is confirmed by Chen’s study identifying intercultural engagement as the best predictor of ethnocentrism (2010, p.5). As overcoming ethnocentrism is of prime importance to developing intercultural communication (Bennett, 1998; Lin & Rancer, 2003), and intercultural communicative competence is so intimately tied to ELF (Byram, 1997; Hülmbauer, Böhringer, & Seidlhofer, 2008), we can say that students moved closer towards more effective ELF communication as a result of this exchange.

6.2 Gains in Confidence
The students also experienced a medium positive effect in the Interaction Confidence factor of the ISS (d = 0.5). Item 5, “I always know what to say when interacting with people from different cultures,” scored a significant increase (d = 0.7), as did item 6, “I can be as sociable as I want to be when interacting with people from different cultures,” (d = 0.5). This can also be seen as a contributor to intercultural willingness-to-communicate and may have something to do with a lowering of anxiety in relation to communication in the English language.
One of the more positive things to come out of the era of Krashen was the Affective Filter hypothesis (Krashen, 1982), or more specifically, the research that it inspired into studies of learner anxiety (Brown, 1994; E. Horwitz, M. Horwitz, & Cope, 1986; Maclntyre & Gardner, 1994; Young, 1991). Anxiety studies have found particular interest among researchers in Japan (Kitano, 2001; Ohata, 2005; Williams & Andrade, 2008). Williams and Andrade (2008) sought to study the source of the anxiety that Japanese university students felt with regard to English language learning. They discovered that the fear of making a bad impression or receiving a negative evaluation from their teacher (associated with the inability to express oneself clearly and correctly) was the largest contributor to anxiety (p. 186). It seems then, that we as teachers can be the greatest hindrance to a student’s sense of ownership of ELF.

In terms of the Japanese subjects of this study, it is possible that using English to communicate with someone other than their teacher contributed towards a reduction in anxiety. Their counterparts were younger, so there was no authority to fear. Their communication was not graded beyond simply receiving points for participation, so there was no need to fear a negative evaluation from their teacher. Their American high school counterparts made frequent spelling and even occasional grammar mistakes, so there was no need for perfection unless to outperform inner circle users. One could argue then, that the increase in intercultural confidence these subjects experienced points to a greater awareness of their mutual ownership of ELF.

6.3 Negative Results
There were some areas of reduction in intercultural sensitivity. Most notably the near medium effect on the Respect for Cultural Difference factor (p = .08, d = -0.4). This seems to be mostly the result of student responses to item 18, “I would not accept the opinions of people from different cultures,” (p < .001, d = -0.9). Chen (2010) identified respect for cultural differences as the best predictor of intercultural communication apprehension (p. 5). Lin and Rancer (2003) also linked intercultural communication apprehension to intercultural willingness-to-communicate, although to a lesser extent than ethnocentrism. Perhaps then it is fair to say that intercultural willingness-to-communicate was more affected positively by a lowering of ethnocentrism and an increase in confidence than negatively by any apprehension experienced as a result of the exchange.

6.4 Issues with the Experimental Design of this Study
Due to the exclusion of student identification in soliciting responses to the ISS, pretest and posttest results were unable to be tested for linear correlations. Collecting student identification information would also allow for both linear correlations and cross-analysis with student feedback. This could help answer questions such as why the exchange seemed to affect a small increase in intercultural communication apprehension. In addition, there are always language translation issues when translating instruments. Analysis of the Japanese version of the ISS should be examined for internal consistency.

6.5 The Role of Digital Sojourn in the Future of ELF
Michael Byram, who is famous for both his work in intercultural communication and
linguistics, acquaints intercultural communicative competence with “sojourners” who are fundamentally affected by their experiences, affect change in others they meet along their travels, and return home with new perspectives to affect upon their native culture (1997, p. 1). We live in a rapidly changing digital landscape which now provides us ELF teachers with new ways to develop intercultural communicative competence. I see digital sojourn, then, as the next stage of intercultural development. By digital sojourn I mean the use of technology to spend extended amounts of time “traveling” among a particular culture and its people. While it is impractical to expect each ELF user to physically travel around the world in order to gain the invaluable experience associated with intercultural development, ELF users can use modern technology to support their efforts toward intercultural communicative competence through digital sojourn.

In addition to digital pen pal exchange, there are many other ways we can capitalize on our current technological landscape in support of digital sojourn. One example would be to move past the traditional view of pen pal exchange as being between two people. In the age of the Internet, we are no longer limited to one-on-one exchanges as a result of separate, physical mailing addresses. Rather than stick with the notion of pen pal exchanges being between two people, a kind of collaborative pen pal experience could be had using modern social networking tools. There has been some emerging work in this area which has yielded promising results (Jones, 2008). As previously mentioned, many of the American students did not participate in the exchange leaving quite a few of the Japanese students alone or with only another Japanese student to communicate with. A collective exchange would resolve the need for all members to be equally responsive, and could contribute to collaborative intercultural development. In addition, social networking tools can support a social learning atmosphere, an atmosphere which values both emotional and cognitive development equally (Kreijns, Kirschner, & Jochems, 2003).

Most social networking tools are developed for mobile devices, which provides some additional benefits. We already have nearly 100% smartphone use among Japanese university students (Cote, Milliner, Flowers, & Ferreira, 2014), and Japan is not alone in this trend. Whether this trend is ultimately for better or for worse, the fact remains that smartphones are already playing an integral part of this next generation’s social and cultural development. Rather than letting this fact discourage us, we might find ways to implement their use in teacher supported intercultural social development. Using mobile devices for the exchange would allow for easy extension beyond the classroom and the seamless inclusion of multimedia content. Two or more classrooms could easily share cultural artifacts from their individual geolocations through a combination of photos and text, or even video. Students could be inspired by their instructors to generate content to share, or they could simply inspire each other. Here in Japan, students have been observed successfully completing highly complex, multimedia projects in social learning contexts (Flowers, 2014).

In addition to finding creative ways of using technology to support digital sojourn, educators can supplement online intercultural experiences with traditional classroom based methods of intercultural development. Multiple perspectives pedagogy and reflection have been shown to significantly enhance intercultural development over experience alone in overseas exchange programs (Pedersen, 2009). Combining classroom based instruction with student reflection and online intercultural experiences should also effectively bolster
intercultural development in teacher orchestrated digital sojourn.

7. CONCLUSION

Helping our students to overcome ethnocentrism is an important part of our duty as ELF instructors as it supports our student's transition towards intercultural sojourner and empowers them in their mutual ownership of English as a lingua franca. Through a six-week digital pen pal exchange, the students in this study were able to develop their intercultural sensitivity, most notably through decreases in ethnocentrism and increases in confidence with regard to intercultural communication. The fact that they were able to do this without the need for a physical exchange supports the notion that digital sojourn is a viable method for developing intercultural communication. It is hoped that this study will inspire others to experiment with digital pen pal exchange and other such applications of modern technology, which can be used to unite classrooms around the world in authentic ELF.

REFERENCES


APPENDIX A

Intercultural Sensitivity Scale questionnaire (Chen & Starosta, 2000, p. 14)

1. I enjoy interacting with people from different cultures.
2. I think people from other cultures are narrow-minded.*
3. I am pretty sure of myself in interacting with people from different cultures.
4. I find it very hard to talk in front of people from different cultures.*
5. I always know what to say when interacting with people from different cultures.
6. I can be as sociable as I want to be when interacting with people from different cultures.
7. I don’t like to be with people from different cultures.*
8. I respect the values of people from different cultures.
9. I get upset easily when interacting with people from different cultures.*
10. I feel confident when interacting with people from different cultures.
11. I tend to wait before forming an impression of culturally-distinct counterparts.
12. I often get discouraged when I am with people from different cultures.*
13. I am open-minded to people from different cultures.
14. I am very observant when interacting with people from different cultures.
15. I often feel useless when interacting with people from different cultures.*
16. I respect the ways people from different cultures behave.
17. I try to obtain as much information as I can when interacting with people from different cultures.
18. I would not accept the opinions of people from different cultures.*
19. I am sensitive to my culturally-distinct counterpart's subtle meanings during our interaction.
20. I think my culture is better than other Cultures.*
21. I often give positive responses to my culturally different counterpart during our interaction.
22. I avoid those situations where I will have to deal with culturally-distinct persons.*
23. I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues.
24. I have a feeling of enjoyment towards differences between my culturally distinct counterpart and me.

Note: *Items 2, 4, 7, 9, 12, 15, 18, 20, and 22 are reverse-coded.

Interaction Engagement items are 1, 11, 13, 21, 22, 23, and 24,

Respect for Cultural Differences items are 2, 7, 8, 16, 18, and 20,

Interaction Confidence items are 3, 4, 5, 6, and 10,

Interaction Enjoyment items are 9, 12, and 15,

Interaction Attentiveness are 14, 17, and 19.

APPENDIX B

Intercultural Sensitivity Scale questionnaire (Japanese Translation)

1. 私は異なる文化の人たちとのふれ合いを楽しむ。

2. 私は他の文化の人たちが狭量だと思う。

3. 私は異なる文化の人たちとのふれ合いに少し自信がある。
4. 私は異なる文化の人たちがいる空間で話すのがとても難しい。

5. 私は異なる文化の人たちとふれ合う時に何を言え（話せ）いかいつも分かっている。

6. 私は異なる文化の人たちとふれ合う時に赴くままに社交的になることができる。

7. 私は異なる文化の人たちと一緒にいるのが好きではない。

8. 私は異なる文化の人たちの価値観を尊重する。

9. 私は異なる文化の人たちとふれ合う時に怒りやすくなる。

10. 私は異なる文化の人たちとふれ合う時に自信がある。

11. 私は文化的に異なる相手に対しての印象を作る前に待つ傾向がある。（すぐに印象を形成しない）

12. 私は異なる文化の人たちと一緒にいる時に落ち込む。

13. 私は異なる文化の人たちに対して偏見がない。

14. 私は異なる文化の人たちとふれ合う時によく観察する。

15. 私は異なる文化の人たちとふれ合う時に役に立たないとしばしば感じる。

16. 私は異なる文化の人たちの振る舞いを尊重する。

17. 私は異なる文化の人たちとふれ合う時にできるだけ多くの情報を得るようにする。

18. 私は異なる文化の人たちの意見を受け入れない。

19. 私は文化的に異なる相手とのふれ合いの中で、曖昧な意味（裏の意味など）を理解する。

20. 私は自分の文化が他の文化よりも優れていると思う。

21. 私はしばしば文化的に異なる相手とのふれ合いの中で肯定的な応答をする。

22. 私は文化的に異なる相手に対処しなければならない状況を避けられる。

23. 私はしばしば文化的に異なる相手に対して自分の理解を言語もしくは非言語の合図を通じて示す。

24. 私は文化的に異なる相手と自分との違いを楽しむ気持ちがある。