FINAL PROJECT

Killing Two Birds with One Stone: An Empirical Report of Improvement in Reading Rate and Comprehension by Timed Reading in EFL Learners

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SLS 620: Teaching Reading in ESL

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ABSTRACT

This study investigates whether EFL learners can improve their reading rates and comprehension by timed reading. The results showed a significant improvement (an increase) in reading rate in the slow readers and in comprehension in the fast readers as well as slow readers, indicating that timed reading followed by a comprehension test was beneficial for second and foreign language readers in improving their comprehension as well as reading rates.

1. INTRODUCTION

Automaticity theory (LaBerge and Samuels, 1974) considers reading as a dual-level process, involving letter-decoding and text-comprehending. As readers decode letters more rapidly and effortlessly, their attention paid to letter-decoding and text-comprehension separately can be more converged for text-comprehension. The theory emphasizes that the role of repetition through extensive practice is at the center. Training in decoding known words repeatedly at the perceptual lever over time enables readers to read the text more rapidly with less attention, and more attention can be available for a full understanding of the content.

There has been a substantial body of research on automaticity in the first language (L1) reading literature, while scant attention has been paid to automaticity in second and foreign language (L2) reading. This lack of study on fluency in L2 reading can be detected in Hudson’s most recent extensive, thorough review of L1 and L2 reading literature (2007), where the topics of automaticity, fluency, or reading rate in L2 reading are excluded. Presumably, it is partially attributed to the late emergence of L2 reading studies as compared to L1 reading studies. Unlike L1 reading that has observed a series of changes in the trend of theories, approaches, and models from bottom-up to new literacy over the past two decades, L2 reading might not have dealt with all issues that were being covered in L1 reading due to its short literature history. When L2 reading was on the verge of emergence, L1 reading turned its attention toward New Literacy after undergoing a period of intense interest in automaticity between the 1970s and the early 1990s. In addition, New Literacy focuses on “a social and anthropological approach to reading that de-emphasizes the role of the AUTONOMOUS READER (Hudson, 2007, 55).” As a consequence, automaticity theory missed its timing to be placed at the center and be empirically tested in L2 reading.

The purpose of the current study is to investigate whether L2 readers, especially in EFL context are able to improve their reading rates and comprehension by timed reading over a
period of one month (three months in the original proposal) on a regular basis. Although our study is primarily concerned with fluency, which is related to automaticity theory, our focus is on raising awareness of fluency by timed reading, not by repeated reading.

2. LITERATURE REVIEW

To our knowledge, there are only four studies on reading rate in the L2 reading literature, Taguchi (1997), Taguchi & Gorsuch (2002), Taguchi, Takayasu-Maass, & Gorsuch (2004), and Day & Hill (To appear). Taguchi (1997), for the first time in L2 reading, conducted an assisted repeated reading study with 15 Japanese university students. The participants had 30-minutes of assisted repeated reading training three times per week over ten weeks. In the training, an initial silent reading was followed by six readings of the same material, three times with listening to an audio recording and three times without such listening. Only the last three readings were timed. Taguchi reported that there was a significant increase in reading rates, but no transfer to a new passage. However, this study fails to provide convincing results due to methodological problems, such as the lack of a control group and small size of population.

Taguchi & Gorsuch (2002) conducted another assisted repeated reading study using the same methodology as Taguchi (1997) with 18 Japanese university students, half in the experimental group and half in the control group. They found that there was a significant improvement between the pretest and the posttest. However, there was very little evidence of transfer to a new reading passage. In addition, there was no significant difference in reading rate on the first reading of the posttest between groups. Although they avoided the “No-Control-Group Pitfall” (Carver, 1990), the sample size is still too small to provide reliable statistical results.

From their comparison between an extensive reading group (n=10) and a rapid reading group (n=10), Taguchi, Takayasu-Maass, & Gorsuch (2004) finally found a transfer effect from the practice passages to the posttest passage. However, the size of population is too small to generalize their results.

Most recently, Day and Hill (To appear) performed a timed repeated reading experiment with 161 Vietnamese second-year university students, 76 in the experiment group and 85 in the control group. In the training session, the participants read the same passage three times for one
minute each time. For the first reading, they read the passage as much as they could for one minute. For the second and third readings, they went back to the beginning of the passage and read it again for one minute. The participants were engaged in the training over 10 weeks with a five-minute training period per week. Day et al. found neither a main effect on group (experiment and control) nor interaction effect between Test (pre and post) and Group (experiment and control). Most problematically, they did not measure participants’ comprehension, “No-Comprehension Measure Pitfall” (Carver, 1990). In addition, although their study involves a 10 week-training, a total amount of training time was just 50 minutes. It is even more surprising if we obtain significant improvements from such insufficient training time.

3. METHOD
3.1 Research questions
This study investigates the following research questions:

1. Does Timed reading improve L2 readers’ reading rates?
2. Does Untimed reading improve L2 readers’ reading rates?
3. Does the Timed/Untimed condition have differential effects on reading rates?
4. Does the Comprehension condition improve L2 readers’ comprehension?
5. Does the No-comprehension condition improve L2 readers’ comprehension?
6. Does the Comprehension/No-comprehension condition have differential effects on comprehension?
7. Does the Comprehension condition affect L2 readers’ comprehension with respect to their reading rates?
8. Does the No-comprehension condition affect L2 readers’ comprehension with respect to their reading rates?

3.2 Participants, Instrument, and Procedure
We conducted an experiment with 139 EFL learners assigned to four separate classes at KangNeung National University in South Korea while the experiment was being performed (Spring 2008). The majority of them were first- and second-year students. Each class consists of
population from identical or at least similar major areas; thus, each group can be regarded as being homogeneous with respect to schemata, academic interest, and English proficiency level. However, our study is subject to differences in such components between groups.

We tried a mixed design combining a quantitative (reading rate and comprehension accuracy) and qualitative methods (survey). To measure reading rate and comprehension accuracy, we adapted the instrument from Mikulecky & Jeffries (2004). A total of 7 passages have been used up until the point of the mid-test: pretest with Passage 1 in Week 1, practicing with 5 passages from Passage 2 to Passage 6, and mid-test with Passage 7 in Week 4. Each passage contained approximately 500 words. The instruments used for the pretest and mid-test are presented in Appendices A-D. We also developed two survey instruments, one for the participants and the other for the instructors. They will be administered after completing the posttest in Week 10. The survey instruments (English version) are presented in Appendix E (for the participants) and F (for the instructors).

The participants in four classes (groups) were treated differently depending on two factors (1) timed reading and untimed reading and (2) comprehension test and no comprehension test.

To be more precise, the participants in Group 1 were timed while they read a passage. They checked their reading time using their own stop-watches individually. By explicitly addressing that reading rate would not affect their final grades, we tried to avoid cheating in their self-report. As soon as they finished reading the passage, they answered eight comprehension questions based on their understanding of the passage. They were not allowed to go back to the passage to look for the information to answer the comprehension questions. Upon completing both tasks, they checked the answers with the instructor. They followed the same procedure for the second passage. The participants in Group 2 did the same as those in Group 1 did except that a comprehension test was not included. The participants in Group 3 read the same materials as the experimental groups (Groups 1 and 2) did at their own speed without being timed. Finally, participants in Group 4 served purely as a control group, neither being timed nor tested for comprehension.

To sum up, Groups 1 and 2 are the experimental group and Groups 3 and 4 are the control group with respect to the condition of timed/untimed reading. On the other hand, Groups
1 and 3 are the experimental group and Groups 2 and 4 are the control group with respect to the condition of comprehension/no comprehension test. The number of participants in each group and treatment are summarized in Table 1.

Table 1: Grouping by timed reading and comprehension

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Group 1 (n=38)</th>
<th>Group 2 (n=37)</th>
<th>Group 3 (n=39)</th>
<th>Group 4 (n=25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timed reading</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Comprehension</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes: 1. + indicates treatment.
2. – indicates no treatment.

All four groups engaged in an approximately 30-minute practice session, reading two passages once a week over a period of 4 weeks (including the pretest and mid-test). Their reading times were converted into reading rates computed as WPM (words per minute) and the number of correct answers to the comprehension questions was counted to measure comprehension. The formula for reading rate is presented below:

\[
\text{WPM} = \frac{\text{reading time in seconds}}{\text{total number of words in the passage} \times 60}
\]

All participants took the pretest in Week 1 before the treatment and took the mid-test in Week 4 after three-weeks of practice. In order to avoid a practice effect (test-treatment pitfall), all different passages were used each time.

### 3.3 Data Analysis

We conducted descriptive statistics, independent t-test and Repeated Measures ANOVAs to answer the research questions addressed above. First of all, we excluded 5 participants who missed either pretest or mid-test and 4 participants whose comprehension scores in either pretest
or mid-test were zero. As a result, a total of 128 participants remained for data analysis. The number of remaining participants in each condition for data analysis is summarized in Table 2.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Group</th>
<th>Combination of Groups</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timed/Untimed</td>
<td>Experiment</td>
<td>Group 1 + Group 2</td>
<td>N = 70</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Group 3 + Group 4</td>
<td>N = 58</td>
</tr>
<tr>
<td>Comprehension/No</td>
<td>Experiment</td>
<td>Group 1 + Group 3</td>
<td>N = 71</td>
</tr>
<tr>
<td>No Comprehension</td>
<td>Control</td>
<td>Group 2 + Group 4</td>
<td>N = 57</td>
</tr>
</tbody>
</table>

As we conducted an experiment with the existing classes of students who had registered for the regular English reading courses at the university, it was impossible for us to reassign them to groups based on their English proficiency level for the purpose of our study. As already stated in Section 3.2, the participants’ English proficiency levels in each class seem to be equivalent, since those in the same class major in the same or similar academic fields. This assumption was virtually confirmed by their pretest results. Each group showed a very uniform distribution of reading rates and comprehension accuracy. However, this is not the case across classes. Overall, Groups 1 and 2 showed better performance than Groups 3 and 4 did in reading rates and comprehension accuracy. The scores of WPM and comprehension accuracy obtained from the pretest are presented in Tables 3 and 4.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Pretest</th>
<th>Mid-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>Timed</td>
<td>75</td>
<td>143.52</td>
</tr>
<tr>
<td>Untimed</td>
<td>64</td>
<td>97.17</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>240.69</td>
</tr>
</tbody>
</table>
Table 4: Comprehension accuracy by Comprehension/No-comprehension condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>N</th>
<th>Pretest M</th>
<th>Pretest SD</th>
<th>Mid-test M</th>
<th>Mid-test SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>77</td>
<td>5.64</td>
<td>1.79</td>
<td>6.77</td>
<td>1.79</td>
</tr>
<tr>
<td>No comprehension</td>
<td>62</td>
<td>4.10</td>
<td>1.43</td>
<td>5.22</td>
<td>1.59</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>9.74</td>
<td>3.22</td>
<td>11.99</td>
<td>3.69</td>
</tr>
</tbody>
</table>

An independent $t$-test showed that there is a significant difference in pretest reading rate between the Timed group and the Untimed group, $t(126) = -5.540, p = .000$, indicating that the variances of the two populations are not equal in terms of reading rate. In order to cope with this problem, we further divided the experiment and control groups into two subgroups, (a) slow–level readers vs. fast-level readers in terms of reading rate, and (b) lower-level readers vs. higher-level readers in terms of comprehension accuracy based on medians obtained from the pretest. The medians for the classification of the participants by condition are displayed in Table 5.

Table 5: medians for the classification of the participants by condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Group</th>
<th>N</th>
<th>Total</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow vs. Fast by Timed/Untimed condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timed</td>
<td>1 &amp; 2</td>
<td>70</td>
<td>9580</td>
<td>136.5</td>
</tr>
<tr>
<td>Untimed</td>
<td>3 &amp; 4</td>
<td>58</td>
<td>5636</td>
<td>97.5</td>
</tr>
<tr>
<td>Lower vs. Higher by Comprehension/No-comprehension condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>1 &amp; 3</td>
<td>71</td>
<td>363</td>
<td>6</td>
</tr>
<tr>
<td>No comprehension</td>
<td>2 &amp; 4</td>
<td>57</td>
<td>234</td>
<td>4</td>
</tr>
<tr>
<td>Slow &amp; Fast by Comprehension/No-comprehension condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>1 &amp; 3</td>
<td>71</td>
<td>9443</td>
<td>132</td>
</tr>
<tr>
<td>No comprehension</td>
<td>2 &amp; 4</td>
<td>57</td>
<td>5773</td>
<td>96</td>
</tr>
</tbody>
</table>

The results of descriptive statistics for each subgroup are presented in Tables 6, 7 and 8.
Table 6. WPM of slow & fast readers by Timed/Untimed condition

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>N</th>
<th>Pretest</th>
<th></th>
<th>Mid-test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Timed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow</td>
<td>38</td>
<td>107.10</td>
<td>27.77</td>
<td>121.51</td>
<td>29.45</td>
</tr>
<tr>
<td>Fast</td>
<td>32</td>
<td>179.93</td>
<td>32.86</td>
<td>164.68</td>
<td>41.84</td>
</tr>
<tr>
<td>Untimed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow</td>
<td>29</td>
<td>73.75</td>
<td>17.74</td>
<td>76.51</td>
<td>15.86</td>
</tr>
<tr>
<td>Fast</td>
<td>29</td>
<td>120.58</td>
<td>18.87</td>
<td>105.41</td>
<td>25.81</td>
</tr>
</tbody>
</table>

Table 7: Comprehension accuracy of slow & fast readers by Comprehension/No-comprehension condition

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pretest</th>
<th></th>
<th>Mid-test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow</td>
<td>35</td>
<td>4.29</td>
<td>1.917</td>
<td>5.48</td>
</tr>
<tr>
<td>Fast</td>
<td>36</td>
<td>6.77</td>
<td>0.800</td>
<td>7.70</td>
</tr>
<tr>
<td>No comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow</td>
<td>27</td>
<td>3.88</td>
<td>1.45</td>
<td>4.55</td>
</tr>
<tr>
<td>Fast</td>
<td>30</td>
<td>4.29</td>
<td>1.35</td>
<td>5.70</td>
</tr>
</tbody>
</table>

Table 8: Comprehension accuracy of high & low readers by Comprehension/No-comprehension condition

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Pretest</th>
<th></th>
<th>Mid-test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>34</td>
<td>3.38</td>
<td>1.19</td>
<td>5.16</td>
</tr>
<tr>
<td>Higher</td>
<td>37</td>
<td>6.77</td>
<td>0.64</td>
<td>7.5</td>
</tr>
<tr>
<td>No comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>18</td>
<td>2.44</td>
<td>0.78</td>
<td>4.33</td>
</tr>
<tr>
<td>Higher</td>
<td>39</td>
<td>4.61</td>
<td>0.84</td>
<td>5.83</td>
</tr>
</tbody>
</table>
4. RESULTS (Note: Here we report the preliminary data)

4.1 Does Timed reading improve L2 readers’ reading rates?
A repeated measures ANOVA was conducted with Test (pre and mid) as the within-group variable and Rate (slow and fast) as the between-group variable. The results showed that there was a significant difference in reading rate between pre- and mid-tests for the slow readers ($M = 103.07$ & $M = 116.63$, respectively). There was an interaction effect between Test (pre-mid) and Rate (slow-fast), $F(1, 68) = 16.587, p = .000$.

4.2 Does Untimed reading improve L2 readers’ reading rates?
There was neither a main effect on Test nor an interaction effect between Test (pre-mid) and Rate (slow-fast).

4.3 Does the Timed/Untimed condition have differential effects on reading rates?
Even though it is impossible to make a direct comparison between timed and untimed conditions, in order to answer the question, we interpret the results obtained above in research questions 1 and 2 with caution. There was a significant improvement for the slow readers in the Timed condition, but not for any group in the Untimed condition.

4.4 Does the Comprehension condition improve L2 readers’ comprehension?
We conducted a repeated measures ANOVA with Test (pre and mid) as the within-group variable and Accuracy (lower and higher) as the between-group variable. Both lower- and higher-level groups in the Comprehension condition showed a main effect and a potential interaction effect, $F(1, 69) = 68.958, p = .000$, and $F(1, 69) = 15.511, p = .000$, respectively. However, there was a difference in improvement between groups. Even though both groups showed significant effects, the lower-level group ($M = 3.29$ in the pre-test & $M = 5.26$ in the mid-test) showed better improvement than the higher-level group did ($M = 6.78$ in the pre-test & $M = 7.48$ in the mid-test). It seems to be due to a ceiling effect for the higher-level group.
4.5 Does the No-comprehension condition improve L2 readers’ comprehension?

There were significant effects for both groups, $F(1, 55) = 43.234, p = .000$, and an interaction effect between Test (pre-mid) and Accuracy (lower-higher), $F(1, 55) = 7.671, p= .000$, which is surprising. It will be discussed in the conclusion section later.

4.6 Does the Comprehension/No-comprehension condition have differential effects on comprehension?

We interpret the results from research questions 4 and 5 with caution. There were significant improvements for both the lower- and higher-level groups regardless of the Comprehension/No-comprehension condition.

4.7 Does the Comprehension condition affect L2 readers’ comprehension with respect to their reading rates?

A repeated measures ANOVA was conducted with Test (pre- and mid-tests) as the within-group variable and RateAccuracy (accuracy of the slow and fast readers) as the between-group variable. The results showed that there were significant effects for both groups, $F (1, 69) = 54.852, p = .000$. Comprehension was significantly improved for both the slow readers ($M = 4.00$ & $M = 5.45$, respectively) and the fast readers ($M = 6.19$ & $M = 7.36$, respectively).

4.8 Does the No-comprehension condition affect L2 readers’ comprehension with respect to their reading rates?

There was a significant effect only for the fast readers’ accuracy ($M = 4.30$ in the pre-test & $M = 5.83$ in the mid-test), $F (1, 55)= 32.761, p = .000$.

5. CONCLUSION

Overall, we found that slow-level L2 readers showed significant improvements in their reading rates by timed reading, and that both lower- and higher-level L2 readers observed significant improvements in their comprehension by having comprehension tests. It suggests that lower-level L2 readers’ fluency (measured by reading rates and comprehension) can be improved through classroom practice of timed reading.
Why then were the fast readers unable to benefit by timed reading? Following more conservative criteria (200 wpm), the fast readers in our study ($M = 176.96$) are more likely to belong to the intermediate-level. Hence, it is not plausible to speculate that their lack of improvement is attributed to a ceiling effect. We cautiously suggest that their fluency might be located between intermediate- and fast-levels, where advancement toward a next level takes a longer time and more practice. We would call this period a \textit{stagnant/temporary deterioration stage}. It is also conceivable that the fast readers might have put more priority on comprehension than on reading rate.

With respect to comprehension, both the slow and fast groups in the Comprehension condition showed significant improvements in comprehension. It suggests that L2 readers can improve their comprehension by practice, independently from their reading rates. It is noted that the fast readers’ accuracy was higher than the slow readers’, which corresponds with \textit{automaticity theory}, suggesting that diminishing attention paid to letter-decoding increases reading comprehension. Both the lower- and higher-level groups showed significant improvements in comprehension regardless of the Comprehension/No-comprehension condition. It suggests that L2 readers’ comprehension can be improved by extensive reading.

However, L2 readers’ reading rates were raised only in the timed condition. Timed reading involves a high level of concentration for a given time as compared to untimed reading. Thus, long-term practice of timed reading on a regular basis is expected to contribute to raising readers’ reading rates.

Taken together, automaticity and fluency deserves attention in L2 reading research. Likewise, the importance of fluency should be recognized by instructors in ESL/EFL reading classrooms.

6. LIMITATIONS

Although this study tries to overcome the pitfalls found in the previous L2 studies on timed reading, it also has some limitations. Most problematic is the different starting reading rate across groups. In addition, we have a different number of populations across groups and a small number of populations in each group.
Despite such limitations, however, this study is worthwhile enough in L2 reading in that it makes the first attempt to include the two variables, reading rate and comprehension in investigating L2 readers’ fluency. A 30-minute practice per week with a big population – counterbalanced design with four groups – over a long-term period (after all it will be a total of 30 hours) is another achievement this study made. Finally, combining a quantitative (using reading rate and comprehension accuracy measures) and qualitative research methods (administering a survey to the instructors as well as the participants), this study provides a thorough picture of improvement in L2 readers’ reading rates using timed reading in EFL/ESL settings. For the follow-up study, we are going to conduct the same experiment with a controlled onset reading rate across groups.
References


Appendix A
Pretest passage
Africa Today

Newspaper and television reports around the world show Africa as a continent with many problems. They focus on the wars, the starving children, the terrible diseases, and the natural disasters. Other, more positive aspects of life in Africa are rarely shown.

There are, indeed, serious problems in many parts of Africa. The biggest problem facing Africans today is the continuing threat of wars. These wars are in part due to historic competition among tribes. However, in the past, the fighting was local and small scale. In recent years, it has become far more violent and destructive. This is partly because of the destructive power of modern weapons. It is also because the situation has changed dramatically.

Starting in the sixteenth century, European powers began to move into Africa. They took African people to sell as slaves in North and South America. They also took any valuable resources they could find, such as ivory, gold, or diamonds. In the nineteenth century, the European rulers divided up the continent into countries. They did not understand much about African tribal traditions, and so the borers of these countries did not match the tradition borders of tribal lands.

When the countries of Africa became independent in the twentieth century, there were often several different tribes in a country, and each tribe wanted to rule. The result was conflict and civil war. In many countries, the civil wars have been going on for decades as different groups fight for control of the government. Governing means having not only power, but also having access to wealth – and one of the few ways out of a life of poverty. In recent years, it has also meant having control over international aid and, therefore, access to food in times of starvation.

Many of the problems facing Africa today have been worsened by this fighting over control of the government. Countries that are at war have little time or resources to deal with poverty, hunger, or disease. They are unable to take any measures for a better future, and so many countries are becoming poorer and their problems are growing. For example, HIV, the virus that causes AIDS, has spread rapidly in Africa because of the lack of education and health
care, as well as the lack of medical supplies. Other diseases, many preventable, have spread quickly for the same reasons.

In spite of these problems, however, many Africans are helpful about their future. Ordinary people in many countries are joining together to change and improve their lives. Young and talented Africans are looking out to the rest of the world. They are experimenting with ways to use the Internet and other new technology to try to solve some of their problems. In the arts, and especially in music, many talented performers are showing the world what it means to be African. In this unit, the passages will focus on both the continuing problems facing Africa today and some of the interesting and positive developments there.

Appendix B

Pretest comprehension test

Circle the best answer for each item. Do not look back at the passage.

1. This passage is about
a. the diseases in Africa.
b. Independence in Africa.
c. the situation in Africa today.
d. Newspaper reports about Africa.

2. According to this passage, the main factor preventing a solution to Africa’s problems is
a. disease    b. poverty    c. war    d. international aid

3. Wars are more violent in the twenty-first century partly because
a. modern weapons are more destructive.
b. of the lack of education and health care.
c. there has been an increase in natural disasters.
d. valuable natural resources are lacking.

4. In the past, European powers
a. fought over control of the government.
b. tried to help the Africans economically.
c. could not find any valuable resources in Africa.
d. did not understand African traditions.

5. In many countries, different groups are fighting for control over the government so they can
   a. control the spread of the HIV virus.
   b. free their country from European rulers.
   c. change the borders of their country.
   d. become richer and control food supplies.

6. You can infer from this passage that international aid
   a. can help prevent fighting between groups.
   b. may sometimes be a cause of fighting.
   c. might not be helpful in preventing AIDS.
   d. usually has no effect on the fighting.

7. According to this passage, there is a close connection between
   a. access to wealth and level of education.
   b. international aid and the spread of disease.
   c. war and the spread of the HIV virus.
   d. African tribal traditions and poverty.

8. Many young people in Africa today are
   a. hopeful in spite of their problems.
   b. talented politicians and leaders.
   c. hoping to move to other countries.
   d. not interested in their traditions.
Appendix C

Mid-test passage

From Nomad to Farmer

For many African people, life has changed dramatically in recent years. This is especially true for the Tuareg people of north-central Africa. Historically, the Tuaregs led the life of nomads, people with no permanent home. They traveled across the Sahara Desert in caravans of camels, carrying goods between Arab Africa in the north and black Africa in the south.

The Tuaregs did not belong to either of these groups. They were a light-skinned Berber people, with a culture and language of their own. Europeans called them the “blue men” of the desert because they dressed all in blue, even their shoes. They were well known for their great skill in finding their way across the open desert, with only the stars to guide them. They were also known for their independent spirit. In fact, they loved the nomad way of life, which allowed them to come and go as they chose.

National borders had no meaning for them in the desert. During the eighteenth and nineteenth centuries, Africa was divided up and ruled by various European countries, but this did not affect the Tuaregs, who continued to move freely.

In the mid-twentieth century, however, there were big changes in Africa. In many countries, black Africans began to break free of European rule and set up their own governments. As the new governments gained power, national borders became more important and it became more difficult for the Tuaregs to travel and trade. They fought against the changes, but eventually, national borders were closed, and the Tuaregs were forced to limit their travels.

At the same time, another big change had come to the area. People were beginning to use motor vehicles for travel across the desert. Cars and trucks were faster and more efficient than camels. Thus the Tuareg caravans lost their important role in the desert. Then came the great drought of the 1970s and 1980s. With no rain, especially in 1984, large areas of grassland near the Sahara turned into desert. With no grass to eat, many animals died, including the Tuaregs’ camels. Their old way of life was now definitely over.

The question was, how could the Tuaregs now make a living? They noticed that the people who lived near water holes could plant vegetable gardens and suffered less from the
drought. Soon Tuaregs began to settle down near the old watering places in the desert. One of these was Timia, in central Niger. Until forty years ago, Timia was just a well in the middle of the desert where travelers stopped to rest. Now it has a population of about middle of the desert where travelers stopped to rest. Now it has a population of about 6,000. Most of the people who live there were nomads in the past, but now they make a living from their fruit and vegetable gardens. They grow oranges, grapefruits, pomegranates, dates, and corn, which they send by truck to Agadez, a city about ninety-five miles away. Many miss their caravan days and some dream of teaching their children the old ways, but instead, they are teaching them to be farmers.

Appendix D
Mid-test comprehension test

Circle the best answer for each item. Do not look back at the passage.

1. This passage is about
   a. kinds of transportation in the Sahara Desert.
   b. how life has changed for the Tuareg people.
   c. the history of north-central Africa.
   d. how people grow vegetables in the desert.

2. The Tuaregs were famous for their
   a. beautiful clothes. b. fruits and vegetables.
   c. skill in the desert. d. strange language.

3. The Tuareg people loved the nomad way of life because it allowed them to
   a. have nice homes. b. trade with Arabs.
   c. move around freely. d. ride on camels.

4. In the twentieth century, many new African nations
   a. welcomed the Tuareg. b. closed their borders.
   c. traded with Arab countries. d. built roads across the desert.

5. People began to use cars and trucks to cross the desert because
a. they were faster than camels.  
b. there was a terrible drought.  
c. national borders were more important.  
d. camels got lost in the desert.

6. The drought of the 1980s.  
   a. had no effect on the Tuaregs.  
   b. helped new government gain power.  
   c. produced more grass for the animals.  
   c. caused many camels to die.

7. The Tuaregs could no longer make a living as  
   a. farmers   
   b. traders.   
   c. soldiers.   
   truck drivers.

8. We can infer from this passage that farming is possible in Timia because  
   a. there is a well.  
   b. people collect rainwater.  
   c. many animals died.  
   d. there is a city nearby.
Appendix E

Survey for Participants

Please answer all of the following questions. This information will be used only for this study.

Background Information

1. Participant No #: (will be given by the administer)

2. Gender: Male[ ] Female[ ]

3. Age: 

4. Enrollment status: Undergraduate [ ] Graduate [ ]

5. Academic year: Freshmen[ ] Sophomore[ ] Junior[ ] Senior[ ]

6. Major at UH: 

English Instruction

7. How long had you received instruction on English in your home country?

year(s)

8. What other languages do you know besides English?

9. If you have lived in English-speaking countries besides the U.S. (e.g., Australia, Canada, England, etc.), specify the country and the length of stay.

Country: year(s) month(s)

Country: year(s) month(s)

English Proficiency

10. In which language skills do you feel strongest? Please put the number next to each skill (1: Strongest, 4: Weakest).

Speaking[ ] Listening[ ] Reading[ ] Writing[ ]

11. Which language skill do you think is the most difficult to improve?

Speaking[ ] Listening[ ] Reading[ ] Writing[ ]

12. Which language skill do you think it possible to improve for the shortest period of time?

Speaking[ ] Listening[ ] Reading[ ] Writing[ ]
Reading Filed

13. Level of reading proficiency in English:
   Beginner[ ] Intermediate[ ] Advanced[ ]

14. Do you like reading in English? Yes[ ] No[ ]

15. How much do you read in English? Approximately pages per week

16. How many hours do you spend on reading in English?
   Approximately hour(s) mins.

17. What genres do you usually read in English? Find three priorities from the list and put them in order. (e.g., Novel, Academic journal, textbook in major-related field, Newspaper, Magazine (e.g., Newsweek, Time, etc), Websites, Test preparation passages (e.g., TOEFL, TOEIC, etc.), Comics, Other
   1: 2: 3:

18. What topic do you usually read about in English? Find three priorities from the list and put them in order. (e.g., History, natural science, sociology, human science, psychology, entertainment, language, literature, medical, criminal justice, environment, travelling, globalization, business, economics, trading, education, music, art, etc.)
   1: 2: 3:

19. What is the most important to be a fluent reader in English? (e.g., reading time, vocabulary, etc.)

Timed Reading

20. Had you timed your reading on a regular basis before you participated in the timed reading activity this semester? Yes[ ] No[ ]

21. Did you know how many words you read per minute in English before you participated in the timed reading activity this semester? Yes[ ] No[ ]

22. Do you think timed reading was helpful for you to improve reading skill in English? Yes[ ] No[ ]

23. If your answer to 22 is YES, please describe how timed reading was helpful in detail.

24. Do you intend to keep timed reading on a regular basis? Yes[ ] No[ ]
Timed Reading & Reading Strategies

25. What reading strategies did you use in order to improve your reading rate? (e.g., skimming, skipping, etc.)

26. What reading strategies did you newly learn in order to improve reading rate from the instructor this semester?

27. What reading strategies were most useful for you to improve your reading time?

Comments and Suggestions

28. Do you think nine-to-ten-week training is enough for you to improve reading rate?
   Yes[  ] No[  ]

29. What suggestions would you make in order to improve timed reading activity in a more meaningful way?

30. Other comments:

   Thank you for your cooperation!
Appendix F
Survey for Instructors

Please answer all of the following questions. This information will be used only for this study.

Instructor
1. Gender: Female[ ] Male[ ]
2. Age: ____________________________
3. Teaching Experience: ____________________________

English reading teaching/learning
4. Please tell us your teaching in reading class.
5. Please define an “advanced reader in a second or foreign language”.
6. What is the most important to be a fluent reader in English? (e.g., reading time, vocabulary, etc.)
7. How much important do you think is reading rate in second or foreign language reading?
   Very important[ ] Not so much[ ] Not at all[ ]

Timed reading
8. Had you known timed reading before you got involved in timed reading activity this semester?
   Yes[ ] No[ ]
9. Based on your observation for a nine-week training, do you think timed reading affected students’ reading skill in general in a positive direction?
   Yes[ ] No[ ]
10. What reading strategies for the improvement of students’ reading rate did you specifically teach in class this semester?
11. How timed reading activity influenced your teaching reading in English?
12. Do you plan to keep timed reading in your lesson?
   Yes[ ] No[ ]
   Specify the reasons. ____________________________________________
Comments and Suggestions

13. Do you think nine-to-ten-week training is enough to improve students’ reading rates?
   Yes[  ] No[  ]

14. What difficulties did you encounter as an instructor in adopting timed reading in your class?

15. What suggestions would you make in order to improve timed reading activity in a more meaningful way?

16. What should be done most urgently in teaching reading in English?

17. What should be done most importantly in teaching reading in English?

18. Other comments:

Thank you for your cooperation!