THE IMPACT OF TEXT DIFFICULTY ON EFL LEARNERS' READING COMPREHENSION AND VOCABULARY LEARNING

By

LU-FANG LIN

Associate Professor, Institution of Applied English, National Taiwan Ocean University, Taiwan.

ABSTRACT

This study investigated which level of graded reader was most appropriate for Chinese-speaking learners of various English abilities and whether there were significant differences in reading comprehension and vocabulary acquisition when different English proficiency (EP) groups read texts of varying difficulty levels. Eight-two senior high school students in Taiwan were divided into low, medium and high EP groups (LEP, MEP, and HEP). They read graded readers at Level 2, Level 3, and Level 4 after class and completed comprehension and vocabulary tests, and a text difficulty questionnaire. The results show, first, that the most suitable graded readers for LEP, MEP, and HEP groups were found. Second, there were significant differences among the three EP groups in the comprehension and vocabulary test scores of these readers. Third, there was a significant correlation between reading comprehension and vocabulary acquisition when each group read the text appropriate for its level of linguistic competency. Armed with the results, instructional recommendations are presented.

Keywords: Graded Readers, English Language Proficiency, Reading Comprehension, Vocabulary Learning, Text Difficulty.

INTRODUCTION

Krashen's Input Hypothesis (1985) emphasizes that receiving ample comprehensible input may promote language acquisition. More recently, Krashen (2007) further elaborated his Input Hypothesis and proposed his Comprehension Hypothesis, claiming that language learners acquire language and develop literacy when they comprehensively understand messages. Learners acquire reading skills not only through ample reading but by reading in a comprehensible context. Thus, to apply Krashen's Comprehension Hypothesis to learning to read in a foreign or second language (FL/SL), the instructor should consider both the quantity and the quality of the input source. To increase quantity, the instructor may require students to read more outside of the classroom; to control for quality, the instructor may provide students with reading material appropriate for their reading ability. However, most previous reading research has focused on increasing the amount of reading material but has ignored its quality, that is, the appropriateness of the reading material to the student's target language proficiency. This study involved an extended reading activity, which should be regarded as a bridge between intensive reading in the classroom,

which places great emphasis on detailed interpretation of text, and extensive reading outside of the classroom, which floods students with a large amount of reading material. This bridge is necessary because confusion and controversy still surround which materials are and are not suitable for FL/SL students to read. This study provides practical advice for choosing which reading materials to introduce in an extended reading activity.

The previous research is inconsistent in its recommendations for text difficulty for FL/SL reading material. Some researchers suggest that the learner be steered toward books that are written at a low reading level (Bamford & Day, 1998; Day & Bamford, 2002). In fact, some researchers suggest that learners read books at their current reading level, claiming that they need to be familiar with at least 95% or even more of the words in a text if they want to comprehend and learn from it (Laufer, 1992; Nation, 1997). "Linguistically difficult texts are unlikely to be suitable for developing most reading skills" (Nuttall, 1996, p. 177). In contrast, some research claims that overly simplified texts cannot improve the learner's reading competence, recommending that learners read materials that are considerably more difficult than what they can easily read

(Krashen, 1985; Tweissi, 1998). Although these studies provide evidence that language learners improve their reading skills based on variations in text difficulty, little is known about the effects of text difficulty on language learners. Moreover, the previous research has not clarified the contribution of the learner's language proficiency level to the improvement of reading skills. At present, there is no empirical research providing a concrete link between the learner's language proficiency and the difficulty of the reading material. This study was conducted to fill that gap.

Literature Review

Extended Reading

Effective reading instruction requires that the learner dedicate time to practicing reading skills. Because of the limited duration of class time, the learner needs to do additional reading outside of the classroom. Extensive reading (ER) is a kind of extended reading activity that addresses this limitation in class time. ER exposes the learner to ample reading material "with the focus generally on the meaning of what is being read [rather] than on the language" (Carrell & Carson, 1997, pp. 49-50). In this study, students read independently for the meaning of the text instead of focusing on the language.

A number of investigations of ER in FL/SL contexts have been conducted with beneficial results. For example, several studies showed fruitful gains in reading proficiency as a result of ER activities (Cho & Krashen, 1994; Elley, 1991; Mason & Krashen, 1997). The students also improved their writing skills (Hafiz & Tudor, 1989; Mason & Krashen, 1997) and achieved gains in vocabulary (Cho & Krashen, 1994; Hafiz & Tudor, 1989). The enthusiasm for ER in FL/SL contexts increased further at the turn of the 21st century, with more studies indicating its benefits (Bell, 2001; Camiciottoli, 2001; Jacobs & Gallo, 2002; Powell, 2002).

With ample evidence from successful ER programs in FL/SL contexts, Day and Bamford (2002) proposed ten principles for administering such programs (pp. 137-140). Looking generally at these principles, the essential elements included in ER are the student, the teacher and the reading material. Whether or not the student has a successful reading experience outside of the classroom is largely dependent on the reading materials, of which text difficulty

is the major factor considered in this study. Materials with a heavy burden of vocabulary and grammar may hinder the students from reading fluently (Laufer, 1992; Hirsh & Nation, 1992; Nation, 1997), whereas they may have difficulty making gains in comprehension ability with over-simplified reading materials (Krashen, 1985; Tweissi, 1998). On the other hand, a number of studies have shown that reading a large quantity of graded material at the appropriate level of language proficiency helps FL/SL students to improve their reading speed, and reinforces basic vocabulary and grammatical structure (Bamford, 1984; Kitao & Shimatani, 1988; Hill, 2001; Rodrigo, 1995). Day and Bamford (2002) claimed that it is necessary to choose materials close to the student's level of linguistic competence. The results, however, are not consistent. With the conflicting results concluded from these studies, instructors may be indecisive when confronted with the need to select reading material for their students.

However, earlier empirical research did not demonstrate a clear text difficulty index for students with different English proficiencies, indicating which level of graded readers students of high, medium and low English proficiency should read. If the difficulty of the reading materials matches the learners' target language proficiency, it is assumed that they will understand the content and acquire vocabulary from the materials successfully. This study was undertaken to determine the nature of this connection.

Taxonomy of Text Difficulty

Krashen's Input Hypothesis claims that an essential condition for language acquisition to occur is that

> *The acquirer understand[s] input language that contains structure 'a bit beyond' his or her current level of competence. If an acquirer is at stage i, the input he or she understands should contain i +1 (Krashen, 1981, p. 100).*

According to this assumption, Krashen (1985) explained that the $i+1$ stage represents some linguistic elements in the text that the reader has not yet mastered and that are beyond the reader's competence. However, the scope of the input corresponding to $i+1$ is still not clear. Several questions can be raised, such as what degree of increase in difficulty is just far enough, and whether input of $i+1$ is

suitable for English learners of different English abilities. Other relevant questions include what other levels of input can be involved and whether other levels of input may contribute to improving FL/SL learners' reading.

In this study, text difficulty was determined by linguistic elements. This study adopted readers which were graded in terms of vocabulary and sentence structure (Pearson Education Limited, 2012). The linguistic elements of the input considered in the current study were vocabulary and syntactic structures which were also investigated in Day and Bamford's (2002) study. Following Samuel's (1994) terms, three levels of text difficulty were used in this study: (a) level i -1 represents vocabulary and syntactic structures below the learner's English linguistic competence; (b) level i represents vocabulary and syntactic structures at the learner's current English linguistic competence; and (c) level i +1 represents vocabulary and syntactic structures beyond the learner's English linguistic competence.

The present study manipulated the variables of English proficiency (EP) and text difficulty (TD) to investigate the effects of TD on the reading comprehension and vocabulary learning of learners with different English proficiencies, and also to examine the relationships between EP and TD. This study also included a qualitative analysis. The qualitative interpretation was intended to help language professionals understand how the learners comprehended graded readers and their perception of the reading materials varied with different text difficulty. The present study aimed to address the following questions:

- Which graded readers provide the most appropriate reading material for participants of different English proficiency levels?

- Are there significant differences in text comprehension and vocabulary acquistion when participants with low, medium, and high English proficiencies read graded readers at different difficulty levels?

- Is there a significant relationship between English proficiency and text difficulty?

Method

Participants

A total of 82 students (41 male and 41 female) taking an English course at a public senior high school in Taiwan participated in the study. English was learned as a foreign language (EFL) in the school. The participants' mother language was Mandarin.

As suggested by Gu and Johnson (1996), a composite score was used to represent the students' English proficiency. The composite in Gu and Johnson's study included a university-wide college English test (85%), quizzes taken throughout the year (10%) and the teacher's overall rating (5%). This study adopted an identical distribution, resulting in a composite comprised of a high-school entrance exam English test (85%), quizzes taken in the first semester (10%) and the teacher's overall rating of the student's performance in class (5%). This combined score is referred to hereafter as the English Proficiency Test (EPT). The highest possible score is 100 points. The students were divided into three groups of roughly equal size on the basis of their EPT sum scores. The three English proficiency groups were as follows: 27 low English proficiency (LEP) participants, 27 medium English proficiency (MEP) participants, and 28 high English proficiency (HEP) participants.

Extensive Reading Activity

Due to the benefits of ER programs demonstrated in earlier studies, this study administered an ER program with some modifications; this activity is called an Extended Reading Activity (ERA). To briefly outline the activity, a class of students together selected books they were interested in, then read them outside of class. The participants all read the same book to enable a class discussion. To ensure that each student actually read the books, the teacher required them to read small sections after school every day and led a discussion in class related to the content they had read. This activity lasted for three months. The participants read one book per month.

Instruments

Follow-up reading tests

Follow-up reading tests included subtests of comprehension and of vocabulary. The participants read three graded readers and completed three follow-up tests. Each test had the same question format: a comprehension subtest with 20 true/false questions

focused on evaluating the participants' comprehension of the content of the story, and a vocabulary subtest with 25 multiple-choice questions focused on measuring the participants' vocabulary knowledge acquired from the assigned readers. The questions were designed by Pearson Education Limited (2012). Participants were assigned a sum score (45 points), a comprehension score (20 points), and a vocabulary score (25 points), with one point for each correct answer. The Cronbach's alpha reliabilities of the three tests were calculated ($\alpha = .82$ for the first graded reader; $\alpha = .85$ for the second; and $\alpha = .83$ for the third).

Materials used in the Extended Reading Activity

To fit individual language proficiency, ER by definition involves the use of graded readers (Bamford, 1984), so the materials used in this ERA were graded readers. The use of such texts helps improve learners' FL/SL learning in many ways. For example, graded readers can improve FL/SL writing (Hafiz & Tudor, 1990; Tsang, 1996) and can even improve learners' confidence in reading and their attitudes towards reading for pleasure (Bamford & Day, 1998; Waring, 1997). Day and Bamford (2002) indicated that graded readers written for ESL/EFL learners allow readers to read a book with ease, to familiarize themselves with the linguistic knowledge of the target language, and to gain new information relating to the cultures of other countries.

The starting point for selection of reading materials was determined on the basis of the LEP participants' decisions. They were asked to choose the level of graded reader they preferred to read from among a series from Level 1 to Level 6 of Penguin Readers published by Pearson Education Limited (2012). Eventually, 20 out of 27 LEP participants selected Level 2 as the first graded reader they wanted to read, so this level was selected as the starting point. All participants were then asked to choose what they would like to read from Level 2. Three books were selected: *A Christmas Carol* (Level 2), *Forrest Gump* (Level 3), and *The Client* (Level 4), which were thereafter coded as L2, L3, and L4, respectively. The reading began with the lowest level (L2) and progressed to the highest (L4).

Text difficulty (TD) questionnaire

The questionnaire consisted of three multiple-choice items designed to determine how the learners felt about the difficulty of the L2, L3, and L4 graded readers. Each item included three difficulty choices: (a) Below my English linguistic competence ($i - 1$), (b) At my English linguistic competence (i), and (c) Beyond my English linguistic competence ($i + 1$). The researcher provided the participants with Chinese-language explanations of these choices that translate as follows:

- Below my English linguistic competence: Vocabulary and sentence structure are well within my English competence, and I can understand them without any deliberate effort.

- At my English linguistic competence: Vocabulary and sentence structure are at my current competence.

- Beyond my English linguistic competence: Vocabulary and sentence structure are far beyond my competence.

At the end of the questionnaire, three open-ended questions were asked to explore the reasons why the participants considered the current graded reader to be below, at, or beyond their English competence, how they understand the stories and their perceptions of the graded readers. The participants used Mandarin to write down their response.

Data Collection Procedure and Analysis

The researcher first collected the scores of the participants' high school entrance English exams and administered quizzes in class to assess their English ability. Second, the researcher asked the participants to read the three selected graded readers after class. Once they had finished one graded reader, they were asked to complete a follow-up reading test in class. Afterwards, they read another graded reader, and then the third. After reading the three books and completing the three follow-up tests, they filled out a TD questionnaire.

Eighty-two participants completed the three follow-up reading tests, with a total of 246 follow-up test scores calculated to obtain valid percentage scores. The percentage scores on the follow-up tests were used as the dependent variable, and the participants' EP (LEP, MEP, and HEP) and text difficulty (L2, L3, and L4) were used as independent variables. *T*-tests and Pearson correlation tests

were performed, with the significance set at the .05 level.

In total 82 TD questionnaire responses were calculated for each EP group's frequency of choosing each graded reader. For example, out of 28 HEP participants, 11 considered the L2 reader below their English linguistic competence; thus the frequency in the cell of HEP-Below is 39.28% (see Table 1). In addition, the participants' responses to the open-ended questions in the questionnaire were analyzed qualitatively and used as supplementary data to augment and interpret the results of the statistical analysis.

Results

Appropriate Graded Readers for HEP, MEP and LEP Participants

The data in Table 1 present the three groups' evaluations of each graded reader. Cells labeled "at" reflect a book selection at the participant's level of English competence. The reader with the highest percentage of "at" scores represents the most suitable reader for each EP group. For the LEP group, the percentages of "at" scores for the L2, L3 and L4 readers were, respectively, 81.48%, 66.67%, and 51.85%. Thus, the L2 reader (81.48%) can be viewed as the most suitable reader for the LEP group; for the MEP group, L3 (85.19%); and for the HEP group, L4 (85.71%). Furthermore, Table 1 shows that no MEP or HEP participant considered L2 or L3 difficult to understand.

The Effects of the Three Difficulty Levels of Graded Readers on the LEP, MEP and HEP Participants

The paired t-test results of the three EP groups' comprehension and vocabulary tests are shown in Table 2.

English Proficiency	Text Difficulty	L2 Number	%	L3 Number	%	L4 Number	%
Low	Below	5	18.51	5	18.51	0	0
	At	22	81.48	18	66.67	14	51.85
	Beyond	0	0	4	14.81	13	48.15
Medium	Below	10	37.03	4	14.81	3	11.11
	At	17	62.96	23	85.19	21	77.78
	Beyond	0	0	0	0	3	11.11
High	Below	11	39.28	10	35.71	3	10.71
	At	17	60.71	18	64.29	24	85.71
	Beyond	0	0	0	0	1	3.57

Note. 1. Below = Below my English linguistic competence; At = At my English linguistic competence; Beyond = Beyond my English linguistic competence.

Table 1. The percentage of difficulty options by LEP, MEP, and HEP participants for the three graded readers

Graded Reader	Test	English Proficiency (I)	(J)	Mean Difference (I-J)	Std. Error	Sig.
L2	Comprehension	Medium	Low	6.66	4.72	.37
		High	Low	13.35	4.68	.02*
			Medium	6.68	4.68	.36
	Vocabulary	Medium	Low	13.48	4.84	.02*
		High	Low	26.06	4.79	.00*
			Medium	12.58	4.79	.03*
L3	Comprehension	Medium	Low	7.59	3.32	.08
		High	Low	16.38	3.29	.00*
			Medium	8.78	3.29	.03*
	Vocabulary	Medium	Low	14.66	4.26	.00*
		High	Low	19.36	4.23	.00*
			Medium	4.69	4.23	.54
L4	Comprehension	Medium	Low	8.33	3.65	.08
		High	Low	18.63	3.62	.00*
			Medium	10.29	3.62	.02*
	Vocabulary	Medium	Low	11.40	3.91	.01*
		High	Low	20.06	3.87	.00*
			Medium	8.65	3.87	.08

Note. $* p < .05$.

Table 2. Differences between percentage scores of three graded readers on comprehension and vocabulary tests

On the comprehension tests for the three graded readers, there are significant differences between the HEP and LEP participants. For the L2 graded reader, the HEP participants achieved significantly higher scores than their LEP counterparts on the test of content comprehension, while mean score comparisons between the MEP and LEP groups showed that there was no significant difference in the L2 comprehension scores of these two groups. The material in the L2 reader was ranked as being at the LEP group's level of comprehension, but below that of the MEP group. When reading the L2 reader, the LEP group comprehended almost as much as the MEP group. The non-significant comparison between the HEP and MEP groups showed the same pattern of results as between the LEP and MEP groups. This finding suggests that when the text difficulty is at or below the participants' linguistic competence, the participants understand the content of the text well.

Regarding the L3 reader, the HEP group achieved significantly higher comprehension test scores than both the MEP and LEP groups. In contrast, the difference between the mean scores of the MEP and LEP groups was not significant. However, the data in Table 1 shows that 85.19% of the MEP participants reported that the L3 graded reader was at their level, a percentage that did not differ

significantly from that of the LEP group. This is probably because 66.67% of the LEP participants also reported L3 as being at a suitable level for their English competence, and some of them achieved high scores on the L3 comprehension test.

Statistically significant results for the L4 reader are the same as those reported for the L3 reader. That is, the HEP group differed significantly from the MEP and LEP groups, while the MEP group showed no difference from the LEP group.

On the vocabulary tests, all three paired comparisons (HEP vs. LEP, HEP vs. MEP, MEP vs. LEP) showed significant differences for the L2 graded reader (Table 2). The score of the HEP group is significantly higher than those of the MEP and LEP groups; the MEP group's score is significantly higher than the LEP group's. The significance of these differences suggests that a participant's English proficiency plays an essential role in vocabulary learning, even if the text difficulty is at or below the participant's level of linguistic competence. This is attributable to the fact that it takes time to master the task of vocabulary learning as automatic word recognition; therefore, it was difficult for the participants to recognize vocabulary automatically after reading just one graded reader in a short period of time.

Both the HEP and MEP groups achieved significantly higher scores on vocabulary tests of the L3 graded reader than the LEP group did. there was no significant difference between the HEP and MEP groups' scores on the vocabulary tests. This is because, on the L3 vocabulary test, the MEP group's score increased, while that of the HEP group decreased. The three MEP participants who offered explanations for this on the questionnaire expressed that they had seen the film, *Forrest Gump*, several times on TV and knew the plot quite well before they read this reader. Due to their familiarity with the storyline, they probably paid more attention to the words during the process of reading than to the content. This finding shows that readers' attention is divided between trying to understand the content and trying to cope with new vocabulary, and thus by reducing the load of one it helps the other. The result suggests that for lower level readers, the instructor provide them stories that they are already familiar with.

As shown in Table 2, there were some additional interesting differences between the MEP and LEP groups. The MEP group scored higher than the LEP group on the comprehension subtests of the L2, L3 and even the L4 reader, but the differences between the groups' means were not statistically significant. That is, compared with the MEP participants, the LEP participants showed no statistically significant differences in content comprehension. This finding suggests that the LEP group made much more progress in their comprehension ability than the MEP group did. As for general vocabulary knowledge, the LEP participants' scores were significantly lower than those of the MEP participants across the L2, L3, and L4 readers. The LEP participants did not make statistically significant progress in general vocabulary knowledge with increasing difficulty of the text.

The data in Table 2 reveal that for the comprehension and vocabulary subtests of L2 reader, the HEP group did not achieve significantly higher score than the MEP group. The result suggests that HEP readers do not benefit from the material far below their English language competency.

Each proficiency group's differences between the comprehension and the vocabulary test

T-tests were conducted to examine each proficiency group's differences in the percentage scores on the comprehension and vocabulary tests for the L2, L3 and L4 readers. The statistical results are reported in Tables 3, 4 and 5. For the LEP participants, there is only one significant difference between the percent correct scores of the L2 comprehension and vocabulary tests ($t = 2.19$, $p = .03$); that is, they achieved significantly higher scores on the comprehension test than on the vocabulary test for the L2 reader. This again supports the aforementioned non-significant difference results between the MEP and LEP groups' comprehension test scores , indicating that the LEP group made good progress in comprehension when reading the text suitable to their level of proficiency. The LEP participants performed obviously better on content comprehension than on vocabulary acquisition when reading the L2 text.

The results of the HEP group show one significant difference between the percent-correct scores of the L2 comprehension and vocabulary tests ($t = -2.28$, $p = .03$).

That is, the HEP group's vocabulary score was significantly higher than their comprehension score on the L2 tests, indicating that they understood the vocabulary better than they understood the content of the L2 reader. A possible reason for this result is that the HEP participants already had excellent vocabulary knowledge at the level of the L2 readers, and thus did not improve their vocabulary by reading at this level.

Relationships between English Proficiency and Text Difficulty

Pearson correlation tests were conducted to examine correlations between the percent-correct scores on the comprehension and vocabulary subtests for the L2, L3, and L4 readers. The statistical results are summarized in Tables 3, 4 and 5.

For the LEP participants (Table 3), the percent-correct scores on the comprehension and vocabulary tests were significantly correlated with each other for the L2 ($r = .59$, p

Graded Reader	Comprehension Test Mean	SD	Vocabulary Test Mean	SD	Correlation	t	p
L2	71.11	22.42	62.22	24.16	0.59*	2.19	0.03*
L3	66.30	14.05	61.78	17.52	0.46*	1.41	0.17
L4	63.33	16.98	60.15	17.17	0.11	0.73	0.47

Note. * $p < .05$.

Table 3. Correlations and differences between LEP participants' comprehension and vocabulary test scores of L2, L3, and L4 graded readers

Graded Reader	Comprehension Test Mean	SD	Vocabulary Test Mean	SD	Correlation	t	p
L2	77.78	19.23	75.70	17.33	0.83*	0.98	0.33
L3	73.89	14.09	76.44	12.66	0.74*	-1.37	0.18
L4	71.67	10.47	71.56	13.56	0.12	0.04	0.97

Note. * $p < .05$.

Table 4. Correlations and differences between MEP participants' comprehension and vocabulary test scores of L2, L3, and L4 graded readers

Graded Reader	Comprehension Test Mean	SD	Vocabulary Test Mean	SD	Correlation	t	p
L2	84.26	6.31	88.15	8.76	0.35	-2.28	0.03*
L3	82.78	7.64	81.19	16.75	0.58*	0.60	0.55
L4	82.78	11.46	80.07	12.18	0.60*	1.32	0.20

Note. * $p < .05$.

Table 5. Correlations and differences between HEP participants' comprehension and vocabulary test scores of L2, L3, and L4 graded readers

$< .05$) and L3 readers ($r = .46$, $p < .05$). Regarding the L2 reader, the LEP participants achieved significantly higher scores on the comprehension test than on the vocabulary test. For the L4 reader, there was no significant correlation or difference between the percent-correct scores on the comprehension and vocabulary tests.

As shown in Table 4, the MEP participants' percent-correct scores on the comprehension tests were significantly correlated with their vocabulary test scores for the L2 ($r = .83$, $p < .05$) and L3 readers ($r = .74$, $p < .05$). The two correlations of the MEP group were very strong. When reading the L2 and L3 readers, the MEP participants' performance on content comprehension and vocabulary learning were highly correlated, while their comprehension and vocabulary test scores for the L4 reader were not significantly correlated. For the MEP group, therefore, the relationship between content comprehension and vocabulary learning for the L4 reader was weak.

The HEP participants outperformed the MEP and LEP participants on the comprehension and vocabulary tests for the L2, L3, and L4 graded readers, judging from the mean scores in Tables 3,4 & 5. The data in Table 5 show that the scores on the comprehension tests significantly correlated with their scores on the vocabulary tests for the L3 and L4 readers but not for the L2 reader. A possible reason for the lack of a significant correlation between the L2 comprehension and vocabulary tests is that the HEP participants already had excellent general vocabulary knowledge at this level and thus did not rely on their understanding of the content to improve their vocabulary.

In general, the results show that there is a statistically significant correlation between reading comprehension and vocabulary learning when each proficiency group reads the text appropriate to its linguistic competence level. The findings suggest that an appropriate level of text facilitates comprehension and vocabulary learning simultaneously.

Discussion

Earlier research on ER revealed a problem of determining a suitable level of text difficulty for FL/SL learners. The findings of the present study offer a concrete example of which levels of graded reader participants of low, medium, and

high English proficiencies could read to foster their reading comprehension ability and vocabulary learning. In this study, HEP participants who read graded readers far below their current reading competency did not foster their comprehension ability or acquire vocabulary successfully. This study suggests both a learner's target language proficiency and text difficultly play an essential role in reding comprehension and vocabulary learning.

Most of the HEP readers considered the L2, L3 and L4 graded readers either below or well within their English linguistic competence. Compared to another two proficiency counterparts, the HEP participants had sufficient vocabulary knowledge. Their reading process is mostly top-down. For example, one HEP participant stated that he just followed the words and kept on reading line after line, only sometimes using Chinese to think about the meaning of a section, such as a paragraph or a chapter. Using a completely different approach, another HEP participant mentioned that when she first confronted a new word, she attempted to link it with some other words she had learned and then speculated on how it might fit with the conceptual framework she had hypothesized earlier.

In this study, the HEP participants did not need to make great efforts to understand the content of the readers below their EP. One HEP participant said that he did not encounter unfamiliar words but repeatedly encountered words with which he had some familiarity and thus effortlessly recognized them while reading the three readers. For this HEP participant, the words in all three readers were within his sight vocabulary, and his familiarity with them led to an automatic reading process. However, HEP group did not perform well in the comprehension test for the L2 reader. One HEP participant expressed that he lost patience when reading the L2 reader and skimmed through the pages without paying attention to the details of the story, and thus he did not score very highly on the L2 content comprehension test compared to the L4 content comprehension test. Another HEP participant said that she would prefer to read a higher level reader to learn some new words or syntactic structures. Moreover, one female HEP participant expressed that she would like to learn high-level reading skills in preparation for the vast amount of reading required of both undergraduate and graduate students. The statements of the two female participants are consistent with Krashen's (1985) input hypothesis, in which the comprehensible input has to contain elements that are slightly beyond the learner's current competence (i), that is, at level $i + 1$, for further acquisition to take place. For this group of advanced learners, the text at the level of i-1 cannot improve their English Learning.

In addition, a difference in the comprehension approaches between the HEP and LEP participants is evident throughout the three reader tests. Most of the LEP participants struggled with the difficult process of recognizing, guessing, learning and refining their knowledge of the words from context. The reading process of the LEP participants is mostly bottom-up. Some extracts from the open-ended questions are provided to explain this situation. Although all groups of participants engaged in translation to some degree, they differed from each other in certain ways. For example, one LEP participant, when reading the L2 reader, felt very comfortable; however, when reading the L3 and L4 readers, another LEP participant said that she translated each word in each sentence into Chinese and thought about the meanings of these sentences in Chinese. She felt exhausted when she read the L4 reader because the sentences were much longer than those in the L2 reader. Another LEP participant stated that he engaged himself in individual word analysis and had trouble relating these words to what he had previously read in the books. This situation was particularly obvious when he read the L4 reader. Similarly, one LEP participant stated that starting with the L2 reader, whenever he encountered a word he did not understand, he stopped reading and looked it up in the dictionary. He explained that he had no sense of security if he did not clarify the meaning of the unknown word right away.

As shown in the extracts, the LEP participants had limited knowledge of vocabulary and were not able to synthesize all sources of information about a word in the various contexts. The LEP students' reports of their difficulties indicate that most of them lacked a significant sight vocabulary and thus could not read the text fluently. As Grabe (1988) pointed out, a lack of sufficient sight

vocabulary "may be the greatest single impediment to fluent reading by ESL students" (p. 63). The development of a large sight vocabulary can lead to reading becoming automatic (Samuels, 1994), but the materials for this "automaticity training" must be at level *i or i*–1, where there are not too many *i* + 1-level distractions (Samuel, 1994, p. 834). In this study, the L2 reader acted as the LEP participants' level *i* text, and the L3 and L4 readers served as *i* + 1 texts. Thus, this group of LEP senior high school participants should read more at the levels of *i* and *i* -1 to cultivate their sight vocabulary and comprehension ability.

Instructional Recommendations

The findings of the study suggest that *i* + 1 texts are not suitable for all EP groups, and texts should be selected by considering students' EP. Based on this study, it is recommended that LEP participants read texts of a difficulty below or matching their current English linguistic competence. LEP participants are beginning English readers who are at the early stages of English linguistic development. Huckin, Haynes and Coady (1993) stated that beginning second language readers lack a large vocabulary, and hence vocabulary learning from context while reading is "distinctly problematic" for them (p. 290). In this study, the LEP participants showed no differences in performance versus their MEP counterparts in follow-up reading comprehension tests, thus providing support for the argument that using easy texts can foster students' reading comprehension ability (Day & Bamford, 2002; Samuel, 1994). Thus, consistent with the results reported in earlier research (Laufer, 1992; Hirsh & Nation, 1992; Nation, 1997), the findings for the LEP group suggest that students with low EP should be provided with a level of text within which they can automatically recognize a large portion of the words and thus engage in fluent and comprehensive reading.

Concordant with Krashen's (1985) suggestion, some HEP participants should be encouraged to read a more challenging graded reader corresponding to *i* + 1 texts. As shown in the TD questionnaires, the HEP participants had higher reading ability and were thus capable of taking a meaning-centered approach. Moreover, most of them had a large English vocabulary that was rapidly,

accurately, and automatically accessed, so they could read fluently and comprehensively. However, their questionnaire responses demonstrated that they did not make progress in their vocabulary knowledge by reading these graded materials, and some even lost interest in reading the texts at or below their level of linguistic competency. Most HEP students have high expectations for their schoolwork and actively prepare themselves for the stringent demands of higher-level academic work in English. Krashen (2007) indicated that *i* +1 input can contain enough new information to stimulate motivation. To encourage gradual but steady incremental growth of comprehension ability and vocabulary, students with proficient EP should be led to read texts beyond their English linguistic competence so they can master special skills for reading challenging academic texts.

Conclusion

The present research addressed, first, which level of graded reader is appropriate for a given level of English proficiency; second, whether there are significant differences in content comprehension and vocabulary learning when different EP groups read at different difficulty levels. The general results of this study indicate that English learners could improve their reading comprehension ability if given texts of appropriate difficulty levels. The current study further reports significant correlations between text comprehension and vocabulary learning, particularly when learners read a text below, appropriate to, and beyond their linguistic competency.

Based on the results of this study, the author has reformulated Krashen's designation of the FL/SL comprehensible input hypothesis (1985) and further recommends that the materials for automaticity training of beginning FL/SL reading be at the level of *I* or *I* – 1, containing linguistic elements at or below the learners' target language competence. On the other hand, the materials for the higher level of linguistic acquisition of advanced second language reading can be at the level of *i* + 1, containing linguistic elements beyond the learners' target language competence. As Krashen (2007) stated, "the wrong way is the hard way; the right way is the easy way" (p. 2). With the wrong reading material, the students

may suffer frustration and lose interest in reading; on the other hand, with appropriate reading material, reading can become effortless. When selecting reading material for an extended reading activity, an instructor should consider both text difficulty and learner language proficiency.

The current study investigated the effects of text difficulty on language learners. However, two limitations need to be noted: first, the number of graded readers used in this study was insufficient; only using one at each level may weaken the objectivity of the study. Second, on the average the participants were requested to read from one to four chapters per week, and thus the duration of reading one graded reader was one month. There could also be other factors influencing the credibility of the tests. For example, some students might have read the story more than once, and some students might have looked up the meanings of some words in the dictionary. With these limitations in mind, future research should use more graded readers for each level and shorten the period of time allotted to read the story.

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ABOUT THE AUTHOR

Lu-Fang Lin is currently an Associate Professor in the Institute of Applied English, National Taiwan Ocean University, Taiwan and she is involved in research into Multimedia English teaching and learning, English reading comprehension instruction, and video comprehension strategies. Recently, she has published papers in Journal of Educational Computing Research and Educational Media International.