

Effects of a Lexical Approach to Chinese English Major Students’ Reading Comprehension Ability

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Received 31/01/2022	Abstract This study aimed to explore the effects of a lexical approach to Chinese English major students’ reading comprehension ability as well as students’ opinions of this approach. A quasi-experimental study was carried out in a Normal University in southern China for 11 weeks. An intact class of 45 first-year English major students at intermediate level participated in the study. They were instructed using a lexical approach to study four long reading texts. The instruments included reading comprehension tests, a questionnaire, and a semi-structured interview. The results showed that students made much progress in reading comprehension after the treatment and they had positive opinions of the lexical approach. It can be concluded from this that the lexical approach had positive impacts on Chinese English major students’ reading comprehension ability and it suggests that this approach could be implemented in English language teaching and learning for English majors in higher education.
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Introduction

Extensive studies have indicated that high reading comprehension ability is crucial to academic success (e.g., Al-Jarrah & Ismail, 2018; Grabe & Stoller, 2013; Sidek, 2012). Reading comprehension means “reading for meaning, understanding, and entertainment” (Linse, 2005, p. 71). According to Mikulecky and Jeffries (2007), reading comprehension is more than understanding a text, more importantly, it helps students to make sense of what they read by linking the contents to their existing knowledge. Koda (2005) agreed with this view and stated that reading comprehension occurs when a reader derives and incorporates diverse information from a text and connects it with prior knowledge. This means that reading comprehension can be defined as the process of deriving meaning from a text, and readers can integrate the obtained information with their previous knowledge to interpret the author’s intended meaning. Reading fluency and accuracy are integral to reading comprehension. Grabe (2009) proposed that accuracy is a subpart of fluency which is closely related to word recognition ability. Reading fluency is “the ability to read rapidly with ease and accuracy, and to read with appropriate expressions and phrasing” (Grabe, 2009, p. 291). Yamashita and Ichikawa (2010) pointed out that fluent readers are those “who can comprehend a text’s meaning smoothly and effortlessly at an appropriate rate” (p. 264). Therefore, reading comprehension is deeply affected by word recognition skills, accuracy, and speed.

As to college reading instruction in China, lectures mainly employ two instructional methods, the grammar-translation method (GTM) and task-based language teaching (TBLT). GTM is a conventional method for teaching reading since students learn grammar accurately and systematically. However, students learn vocabulary through memorizing bilingual word lists (Larsen-Freeman & Anderson, 2011). This kind of rote learning is ineffective to vocabulary learning, and students may feel bored and gradually lose their interest in learning. Moreover, students tend to adopt the word-by-word reading method, which can impede fluent reading (Nichols et al., 2009). TBLT is a learner-centered method which uses tasks to stimulate students’ interest and develop their reading strategies. Nevertheless, it emphasizes language fluency more than accuracy. Seedhouse (1999) argued that TBLT overemphasizes tasks and communicating meaning, which will affect the learning of correct

language forms. Similarly, it fails to change students' ingrained word-by-word reading method. As a result, learners are inclined to use the word-by-word reading method when taught with GTM and TBLT.

A considerable number of researchers and practitioners have made efforts to explore English as a Foreign Language (EFL) learners' reading problems, and they have concluded that students mainly have these reading problems: a small vocabulary size, difficulty in handling long and complicated sentences, slow reading speed and inability to understand the purposes and main ideas. For example, Wang (2008) reported that being unable to handle long and complex sentences and failing to grasp the main idea are the main causes of not achieving high scores when students take the Test for English Majors-Band 4 (TEM-4) which is the required national test for Chinese English majors. Following an analysis of the TEM-4 test results, Xia (2011) identified students' reading problems which included a small vocabulary size, slow reading speed, and inadequate background knowledge. Likewise, Alsubaie (2014) found that Saudi Arabian EFL learners had similar reading problems to those reported by Xia (2011), and they also lacked decoding skills and effective reading strategies. Furthermore, Wahid and Thais (2020) pointed out that limited vocabulary and the inability to interpret the meaning of a text are the main obstacles to reading comprehension for Indonesian EFL learners. Before the experiment, the researcher conducted an analysis of students' reading problems which were similar to those of previous studies. The majority of students have a small vocabulary size, especially lacking fixed expressions and collocations, and long and complicated sentences are obstructions to their reading comprehension. The reading method is a problem as well because many students read a text word by word. As to the difficulties of taking reading exams, multiple students showed that understanding the purposes and identifying the main ideas are difficult for them.

Other problems experienced by students in their reading can be accredited to ineffective reading instruction, as common teaching methods fail to solve students' deep-rooted reading problems. Therefore, it is essential to seek alternative teaching methods to resolve students' reading problems and improve their reading comprehension ability. The present study intends to apply Lewis's (2002) lexical approach to the Integrated English Course, then to examine the effects of this approach on students' reading comprehension ability, and investigate their opinions on

using this approach to improve their reading. Lewis (2002) proposed that the basis of language learning and communication is not grammar but lexis, especially multi-word combinations, or in other words, lexical chunks, which are the core of the lexical approach. With the lexical approach becoming more popular, many scholars agree that this approach can facilitate language teaching and learning. Kim (2008) stated that the lexical approach has taken an important step forward with a shift from grammar teaching to vocabulary teaching as the focus of language teaching. Hunt and Beglar (2005) maintained that with the incorporation of chunking, exposure, and experimentation, learners have managed to improve their target language through lexical items. Schmitt (2000) pointed out that the lexical approach helps lessen the burden for learners to study grammatical rules. In a nutshell, as reported by Nam (2013), “the lexical approach promotes the transition from grammatical yet artificially contrived language to natural language that is widely accepted by the speech community” (p. 332).

A number of researchers have carried out empirical studies to implement the lexical approach in the teaching of reading. Zhao (2017) explored the effectiveness of the lexical approach in college English reading teaching in China, revealing that participants who experienced the lexical approach made more progress in detailed reading, fast reading, and taking banked cloze tests, which resulted in a positive attitude to learning English. Wang (2014) and Sun (2010) also identified the lexical approach as playing a positive role in improving non-English major students’ reading comprehension ability. Moreover, Nishida (2013) undertook a study in Japan with 122 non-English major participants, which indicated that chunking instruction contributed to enhancing learners’ reading comprehension ability, especially when combined with instruction in phrases or syntactic structures. Furthermore, Ördem and Paker (2016) undertook a quasi-experimental study in Turkey and found that the lexical approach was beneficial to learners’ memory retention and the production of collocations.

The lexical approach has been studied extensively in China and abroad. However, these studies mainly focus on non-English major students, but there are few on English majors. Moreover, when applying the lexical approach to the teaching of reading, many studies stress the explicit instruction of lexical chunks by asking students to identify and memorize them rather than teaching strategies for learning chunks

independently. This study provides training and shows students how to identify, classify, organize, retain, and use chunks effectively. All these activities are important since some researchers have pointed out that, generally speaking, the lexical approach lacks specific teaching guidelines and activities for classroom teaching (Boers & Lindstromberg, 2009; Richards & Rodgers, 2014). Therefore, this study has designed various activities to facilitate the implementation of the lexical approach to fill these gaps and contribute to a more focused approach on English language teaching and learning.

Literature Review

Lexical Approach

Lewis (2002) created the lexical approach which uses lexical chunks as the basic unit of language teaching. The key concept of the lexical approach is that language is composed of multi-word prefabricated chunks, not of traditional grammar and vocabulary. When employing this approach to language teaching, teachers should instruct learners to give emphasis to learning chunks instead of analyzing language. Hence, the core of the lexical approach is lexis, not grammar. Lexis refers to “different kinds of multi-word chunks” (Lewis, 1997a, p. 15). Nevertheless, this approach does not deny the value of grammar which plays a subordinate role in learning a language, and this is specified in the main principle. “Language consists of grammaticalized lexis, not lexicalized grammar” (Lewis, 2002, p. VI). Grammaticalized lexis refers to lexis that contains grammatical information. For example, if a student is learning the word “imagine,” they should master the chunk “imagine doing something” as a whole instead of learning the individual word “imagine”. When producing the word “imagine”, they retrieve the whole chunk from their brain automatically and effortlessly without thinking about its grammatical usage. Lexicalized grammar means single vocabulary items form a sentence based on grammatical structures, which highlights the importance of grammar. Based on this principle, lexis plays the leading role in creating meaning and grammar plays a secondary role in managing meaning.

The lexical approach focuses on the actual language used rather than possible language that seldom occurs in communication, and communication of meaning is the heart of language learning. It aims to

cultivate learners' awareness of lexical chunks and to help them use the lexical chunks in natural language. Hence, correct chunking is of vital importance to comprehension. As Lewis (2002) pointed out, "unless you chunk a text correctly, it is almost impossible to read with understanding, and unless you speak in appropriate chunks, you place a serious barrier to understanding between yourself and your listeners" (p. 58).

Lexical Chunks

The term "chunks" initially appeared in psychology, and was created by Miller (1956), who proposed that chunking is the process of processing information by integrating separate smaller units to become larger meaningful units stored in the brain, and these meaningful blocks of information are called chunks. It was originally applied to the study of the characteristics of human memory. Later, it entered the field of linguistics, and many scholars and researchers began to explore lexical chunks from different perspectives (e.g., Becker, 1975; Howarth, 1998; Lewis, 2002; Wray, 2002). This paper uses Lewis's (2002) proposed term "lexical chunks", which can be defined as fixed or semi-fixed multi-word expressions that are conventionalized and frequently used in communication, and they are processed and stored by learners as a whole for easy retrieval. When producing language, learners automatically search and retrieve lexical chunks from their vocabulary reservoir without strenuous efforts or grammar analysis.

According to Lewis (1997b), lexical chunks can be categorized into four types.

(1) Words and polywords. Words refer to individual words, and polywords are used as independent units that are invariable, and which show a degree of idiomaticity. Polywords include compound nouns, e.g., swimming pool, driving license; phrasal verbs, e.g., *turn off*, *give up*, and fixed phrases, e.g., *in fact*, *as a result*.

(2) Collocations. These are pairs or groups of words that co-occur with very high frequency, e.g., *get married*, *achieve a goal*.

(3) Institutionalized utterances. These are usually used in spoken English to express pragmatic meaning and make conversations, including idioms, e.g., *rule of thumb*; proverbs, e.g., *better late than never*; polite expressions, e.g., *I'm afraid I can't*; grammaticalized utterances, e.g., *just a moment, please*.

(4) Sentence frames and heads. These are usually used in written discourse to allow people to decode complex written texts, e.g., *what surprised me most was that*.

Lexical chunks contribute to improving students' reading comprehension ability from different aspects. Firstly, they promote the development of decoding skills. When reading in chunks, a reader's visual sight is on a group of words rather than individual words. It can not only enlarge the information span, decrease processing time, and foster automatic word recognition ability, but also can facilitate comprehension, for readers comprehend sentences holistically, not separately. Secondly, lexical chunks are beneficial to enhancing reading fluency since the chunk-by-chunk reading method can increase processing speed (Ellis, 2003; Hung & Huong, 2014). Rasinski and Samuels (2011) proposed that grouping words into grammatical and meaningful chunks is fundamental to fluent reading. Thirdly, lexical chunks can help in understanding a text's structure. According to Lewis (2002), a text consists of two parts: a frame and the content. Diversified reading materials have their distinct discourse organization modes, and these modes are usually displayed in various stylistic lexical items which can help learners understand the text's structure more easily.

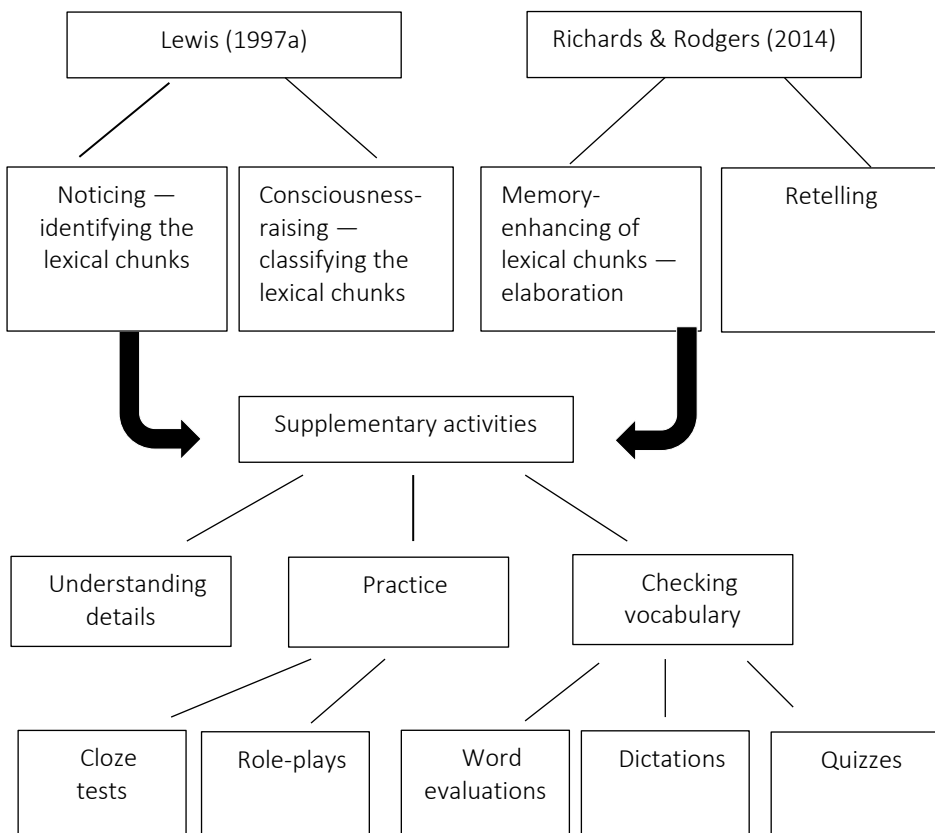
The Framework for Designing Teaching Activities

In this study, the framework for designing teaching activities is adapted from Lewis (1997a) and Richards and Rodgers (2014). These activities are organized based on lexical chunks, because they are the core of the lexical approach. The activities of noticing and raising consciousness of lexical chunks originate from Lewis (1997a), which intend to increase students' awareness of lexical chunks. Memory-enhancing of lexical chunks, namely, elaboration and retelling activities are from Richards and Rodgers (2014). The former activity is used for "enhancing the remembering of chunks" (Richards & Rodgers, 2014, p. 220). Through this activity, learners learn a word from diverse aspects, including pronunciation, spelling, definition, synonyms, antonyms, co-text, collocations, grammatical usages, and derivations. Retelling activities help students use and consolidate the newly learned chunks. Moreover, the framework also supplements other activities, including understanding details, cloze tests, role-plays, word evaluations, dictations, and quizzes. Understanding the details activity

helps students learn a text thoroughly. Cloze tests and role-plays are used to practice the activities. The word evaluations, dictations, and quizzes are used to help students check and consolidate the new lexical chunks. These teaching activities form a complete teaching process and facilitate the application of the lexical approach to the teaching of reading. Examples of all the teaching activities can be seen in Appendix. Figure 1 shows the framework used for designing the teaching activities based on the lexical approach.

Figure 1

The Framework for Designing the Teaching Activities



Methods

Participants

One intact class with 45 first-year undergraduate English major students participated in the study. They were chosen from Hunan First Normal University in China by a convenience sampling method during the second semester of the 2020 academic year. The class included 4 males and 41 females and their age ranged from 18 to 21. They were at an intermediate English proficiency level.

Treatments

Students took the Integrated English Course (IEC) and this course was tailored for first-year and second-year English majors. It trained students in the four basic English skills with the aim of improving their language competence. The teaching materials were based on the textbook, *An Integrated English Course 2*, which had a total of 12 units. Each unit was composed of two long texts of about 1000 words which were excerpted from the classical literature for native English speakers. The present study selected units 2 to 5 to conduct the experiment due to time limitations. The treatment concentrated only on reading skills. Table 1 shows the teaching contents and teaching allocations.

Table 1

Teaching Contents and Teaching Allocations

Teaching Skill:	Reading
Teaching Textbook:	<i>An Integrated English Course 2</i>
Teaching Contents:	Unit 2 Fourteen Steps Unit 3 The Virtues of Growing Older Unit 4 Letter to a B Student Unit 5 Focus on Global Warming
Teaching Duration:	6 hours for each unit

Students studied the course for 3 hours every week and were instructed using the lexical approach. The treatment included two parts. In the first part, students were trained to have a preliminary understanding

of lexical chunks and the lexical approach. The second part was the application of the lexical approach to the IEC. Table 2 presents the main teaching activities for teaching each unit.

Table 2

Main Teaching Activities for Each Unit

Training session (The second week)
Students learn the definitions, features, classification, and functions of the lexical chunks. After that, they do some exercises to check their understanding.
Students learn the key concepts of the lexical approach.
Application of the lexical approach to the IEC (Weeks 3–10)
1. Read the text chunk by chunk and divide it into several parts
2. Noticing: identify the chunks
3. Awareness-raising: classify the chunks
4. Understanding details
5. Memory-enhancing of lexical chunks
6. Practice activities (cloze/retelling/role play)
7. Word evaluation
8. Dictation
9. Quiz

As shown in Table 2, when teaching a text with the lexical approach, firstly, the teacher asked students to read it in chunks and divide it into several parts. Then, she taught the text part by part based on their divisions. In each part, there were several activities. The first activity was noticing the lexical chunks. Students were required to underline the new and important lexical chunks independently. The second activity was awareness-raising of lexical chunks. Students were asked to differentiate different kinds of lexical chunks by marking symbols, e.g., polywords (P), collocations (C), and then they discussed what they had done in groups. The third activity was understanding details. The teacher showed relevant reading comprehension questions on the screen to make students think further about the text. Then, she taught the students some reading strategies. The fourth activity was memory-enhancing of lexical chunks. The teacher taught a word from multiple aspects by giving further details about it (elaboration), including its definitions, synonyms, antonyms, co-text, frequent collocations, grammatical usages, and derivations. In addition, she guided students to analyze long and complex sentences by using chunks. Then the students practiced various activities, involving cloze tests,

retelling, and role-plays, which helped students familiarize the text and consolidate the newly learned lexical chunks. The choice of activity depends on the content of the text. Furthermore, after teaching two parts of the text, there was an evaluation of the vocabulary learnt to assess the newly learned lexical chunks. The list was based on Nation's (2001) view of "what is involved in knowing a word" (p. 27). Then the activities proceeded to a dictation and ended with a quiz at the end of each unit.

Research Instruments

The participants took the reading pretest in the first week and the reading posttest in Week 11. The reading comprehension tests were chosen from the reading section of College English Test Band 4 (CET-4). CET-4 is one of the national tests for non-English major students, which has been recognized by different institutions and has become an important criterion for recruiting employees in various fields. In case the results from one test paper did not clearly differentiate students' reading comprehension ability, the participants were asked to complete two test papers within 90 minutes. In the current study, after comparing 18 test papers administered within three years (2017–2019) based on the types of questions and topics, the researcher selected the first paper from December 2017 and the first paper from December 2018 for the reading pretest and the second paper from December 2017 and the third paper from December 2018 for the reading posttest. Three experts were invited to check the validity of the tests by using the Item Objective Congruence (IOC). Two of these experts had been teaching English in the university for more than 10 years and the other for over five years. The result was 0.917. This showed that the test had high content validity. The reliability of the test was measured by the Kuder–Richardson Formula 20 (KR-20) adopted from Fulcher and Davidson (2007) and the results of the reading pre-test and post-test were 0.745 and 0.733, respectively. The results were greater than 0.7; therefore, the tests were considered reliable.

A questionnaire was used to investigate students' opinions about the effects of the lexical approach on their reading comprehension ability. It was in Chinese and comprised two parts. The first part was a five-point Likert Scale with 11 items to elicit students' responses and the second part included two open-ended questions to explore students' opinions further. The questionnaire was adapted from that of some Chinese researchers (Li, 2017; Sun, 2010; Wang, 2017), and its validity and reliability were checked.

Four experts were invited to check the content validity by using the IOC and the result was 0.909. Therefore, the questionnaire was shown to have high content validity. The reliability was measured by the Cronbach Alpha reliability test in the Statistical Package for the Social Sciences (SPSS), and the alpha value was 0.867. According to George and Mallery (2010), an alpha value higher than 0.8 indicates that the questionnaire is reliable.

The semi-structured interview included six questions to garner an in-depth understanding of students' opinions about applying the lexical approach to the learning of reading. In Week 11, 15 participants attended an interview which was conducted in Chinese. Based on the reading posttest scores, the class was divided into three groups: high (H), moderate (M), and low (L), and five participants were randomly chosen from each group. Thus, of the 15 participants, five students were classified as the high-level group and they were coded as Student 1 (St.1) to Student 5 (St.5), five students from the moderate-level group were coded as St.6 to St.10 and five students in the low-level group were coded as St.11 to St.15. The results were analyzed by means of a thematic analysis.

Results

Results from Pre-test and Post-test Scores

Table 3

Paired Samples T-Test of Students' Pre-Test and Post-Test

Tests	N	Mean	Std. Deviation	Sig. (2-tailed)
Pretest	45	66.30	13.48	.000
Posttest	45	70.77	11.19	

A comparison of the results between the two tests as shown in Table 3 shows that students clearly improved since the average score increased by 4.47, and there was a statistically significant difference between the two tests at the value of 0.000 ($p = 0.000 < 0.05$). Thus, the lexical approach enhanced students' reading comprehension ability.

Results from the Questionnaire

The questionnaire was administered to the participants after the reading posttest. Forty-five valid questionnaires were returned. The data were analyzed quantitatively by descriptive statistics of SPSS and the interpretation of the results is based on Ketkham's (2004) criteria which are given in Table 4 and Table 5 show the results of the Likert Scale.

Table 4

The Criteria for Interpreting the Results of the Questionnaire (Ketkham, 2004, p. 74)

Mean score	Degree of agreement
1.00 – 1.80	Strongly disagree
1.81 – 2.60	Disagree
2.61 – 3.40	Undecided
3.41 – 4.20	Agree
4.21 – 5.00	Strongly agree

Table 5

Results of the Questionnaire on the Likert Scale

No.	Items	Mean	Interpretation
1	Through the training session, I have learnt the basics about lexical chunks, discourse organizers, and the lexical approach.	4.04	Agreed
2	The lexical approach changes my previous 'word by word' reading method.	3.40	Undecided
3	The lexical approach increases my reading interest.	3.47	Agreed
4	The lexical approach builds up my reading confidence.	3.64	Agreed
5	The lexical approach helps me better understand the structure of the text.	3.89	Agreed
6	The lexical approach expands my vocabulary.	3.67	Agreed
7	After learning the lexical approach, I know how to guess the meaning of new words in reading.	3.67	Agreed

8	After learning the lexical approach, I know how to understand long and difficult sentences in reading.	3.71	Agreed
9	The lexical approach is helpful in improving my English reading comprehension ability.	3.91	Agreed
10	The lexical approach helps me improve my reading speed.	3.76	Agreed
11	After learning the lexical approach, I will consciously pay attention to the lexical chunks and highlight them in reading.	3.64	Agreed
Total		3.71	Agreed

Table 5 presents a statistical summary of the first part of the questionnaire, which is about the participants' opinions on using the lexical approach to learn reading. It can be seen that the highest item is item (1) which scores $M = 4.04$, and this means that students agreed with this item. On the contrary, the lowest item is item (2) which scores $M = 3.40$, and this indicates that students are uncertain about the statement. In general, students held a positive opinion about the lexical approach since the mean score of the questionnaire ($M = 3.71$) showed that they agreed with nearly all the categories which scored between 3.41–4.20.

The second part of the questionnaire included two open-ended questions. The first question investigated which aspect the participants improved on the most after receiving the lexical approach instruction. The second question was to ascertain students' readiness to continue using this approach to improve their reading. The results from the answers to the first question are positive, as they show that 75% of the students improved their reading efficiency and they also increased their reading speed, had a greater understanding of the structure and meaning of a text and had learnt how to deal with unknown words as well as long and complicated sentences. In addition, 35% of the students indicated that it facilitated their vocabulary learning. Moreover, 20% of the students stated that this approach helped them to read a passage more quickly. As to the findings of the second question, out of 45 responses, two students gave negative answers, one was uncertain, and the rest of the students showed that they were willing to use this approach in their future learning.

Results from the Semi-Structured Interview

Fifteen students (14 females, 1 male) participated in the semi-structured interview. Four themes were covered from the findings of the interview.

Benefits of the Lexical Approach

Firstly, all the participants had a correct understanding of lexical chunks and the lexical approach. When talking about lexical chunks, they frequently used phrases such as “several words”, “fixed meaning”, “remembered as a whole”, and “helpful for memory retention”. They demonstrated their understanding that the core of the lexical approach is lexical chunks and that this approach would benefit their reading. Some quotes are illustrated below.

St.1 (H): *“A lexical chunk is viewing a fixed expression as a unit, and it is the core of the lexical approach to help us read better.”*

St.10 (M): *“A lexical chunk is a group of words, not isolated, but as a whole. The lexical approach is a teaching method whose center is the lexical chunks, which improves my reading.”*

St.13 (L): *“A lexical chunk is not individual words, but some words are combined to make them easier for us to remember. The lexical approach is a method that cultivates our awareness of lexical chunks, and we read a text chunk by chunk.”*

Secondly, in terms of vocabulary learning, all the participants indicated that after learning this approach, their ideas had changed considerably and they had a better understanding of how to learn new words. They revealed that previously they had learned the pronunciation of a new word, its spelling, and its meaning in Chinese, but now they will learn new words from multiple aspects, e.g., collocations, grammatical usages, derivations, etc. They put more emphasis on the relationships between words, which was beneficial to their vocabulary retention. They also enriched vocabulary by learning the derivations. Some quotes are presented below.

St.4 (H): *"I simply learned a word's spelling and Chinese meaning before, but now I will learn from many aspects."*

St.8 (M): *"... Now I will associate a word with its relevant words, which fosters my divergent thinking ability."*

St.15 (L): *"Before I learn the Chinese meaning of a new word, so every time I encounter the same word in different contexts, I can't understand it. Now I will put the word in the passage and based on the context to understand it, which helps me better understand a word's multiple meanings. I feel that I enhance the contextual awareness."*

Thirdly, the lexical approach contributed to improving students' reading comprehension ability in a variety of ways. It increased their reading speed, helped them understand the structure better and grasp the meaning of a text. Moreover, they learnt some new strategies about how to guess the meaning of new words and deal with long and difficult sentences. Some quotes are presented below.

St.2 (H): *"I can understand the long and complex sentences better."*

St.6 (M): *"It is very helpful in improving my reading speed and understanding the text."*

St.11 (L): *"I used to read a text word by word, and I could not understand the text. Now I use the chunk-by-chunk reading method and can grasp the general idea."*

Suitability of the Lexical Approach for Improving Reading

Thirteen out of 15 students stated the lexical approach was a suitable method for improving their reading while two students were uncertain, reporting that they could not use this approach appropriately. Some representative examples of the students' statements are presented below.

St.1 (H): *"It has some help, but I haven't formed the chunk-by-chunk reading method."*

St.10 (M): *"Suitable. It could help me divide a text more clearly."*

St.15 (L): *"Suitable. It improved my reading comprehension ability. I always read a text word by word before and pay little attention to the relationship between one word and other words. Now the chunk-by-chunk reading method helps me understand a text easier."*

Difficulties in Learning the Lexical Approach

Eleven students disclosed that identifying the lexical chunks was challenging to them. Sometimes they were confused about which words should be put together to form a chunk and this poses a problem for the comprehension of long and complicated sentences since they could not manage to divide the sentences properly based on the correct chunks. As one student explained, *"Incorrect division can easily lead to misunderstanding a sentence."* (St.3, H). Several students had a problem in dividing sentences into lexical chunks. A few students had difficulty remembering the lexical chunks. They reflected that it was easy to forget the newly learned chunks, and the more they accumulated, the more they were confused, especially with regard to collocations and similar words. One student reported that it was hard to use this approach naturally.

Suggestions on Applying the Lexical Approach to the Teaching of Reading

The students' suggestions can be summarized as follows: a. increase extra reading materials; b. provide simpler and more interesting examples; c. cultivate English beginners' awareness of lexical chunks. Some quotes are shown below.

St.6 (M): *"Learners should learn to read in chunks when they start to learn English to develop their consciousness of lexical chunks."*

St.9 (M): *"The explanation of key sentence patterns needs to be clearer and we should be given more practice."*

St.15 (L): *"It would be better if the teacher can appropriately increase the difficulty of the reading materials, and then let us read them in chunks."*

Discussion

In the present study, the mean score of students' reading posttest ($M = 70.77$) was higher than the pretest ($M = 66.30$), so it can be assumed that the lexical approach was effective in helping first-year English major students improve their reading comprehension ability. This finding is similar to a number of previous studies (Nishida, 2013; Sun, 2010; Wang, 2014; Zhao, 2017). In addition, the results of the questionnaire and semi-structured interview revealed that students held positive opinions about the lexical approach. This finding is in accord with a study by Li (2019) who found that after using the lexical approach to improve their reading, students were satisfied with their progress, and they were willing to recommend this approach to other students. Moreover, these results are also similar to those of several other studies (e.g., Lian & Zhu, 2017; Wang, 2017). Two reasons might be given to explain the improvement in students' reading comprehension ability and their positive opinions of the lexical approach.

The first reason is due to the chunk-by-chunk reading method. Multiple studies have shown that reading in chunks facilitates reading comprehension (e.g., Hung & Huong, 2014; Iwahori, 2008; Kuhn & Stahl, 2003). In the present study, students were trained to read texts in chunks. By reading in this way, a group of interrelated words is combined, which relieves the cognitive load. As Stubbs (2001) maintained, lexical content in chunks should not be simply viewed as a combination of individual words nor a haphazard list of words but as a gathering of interrelated networks of relations between words. In addition, reading in chunks will reduce eye fixation and increase information span, and will result in a lower risk of missing key information. As stated by Nation (2001), lexical chunks aid learners in alleviating the cognitive burden and saving processing time. To recapitulate, the chunk-by-chunk reading method helps students expand visual breadth, quicken processing speed, and finally improve reading speed. Moreover, they have a better understanding of a text as "phrases provide context for comprehending the following phrases in a sentence" (Hung & Huong, 2014, p. 32). Letters cannot carry meaning, but they become meaningful when they make up words; individual words cannot express ideas, only when groups of words are formed into logical sentences, can ideas be conveyed successfully. Therefore, ideas are not delivered

through individual words, but through phrases and sentences. Nishida (2013) pointed out that “chunks form logical strings of meaning” (p. 180), which aid learners to comprehend the meaning of a sentence.

Secondly, learning activities may have played a pivotal role in improving students’ reading comprehension ability. Students were instructed in the lexical approach which puts overwhelming weight on developing their awareness of lexical chunks, cultivating their ability to identify, classify, and accumulate chunks, and finally helps them enhance their reading ability. When reading a passage, the first task for students was to read it chunk by chunk and divide it into several parts. This activity helps students change their previously ingrained word-by-word reading method and develop the chunk-by-chunk reading method. Hence, when reading a new passage, they are conscious of putting words that are relevant together, which become chunks, and then they understand the meaning of every sentence holistically. The next two activities were identifying and highlighting the lexical chunks that were important and useful to the students, and then they categorized the chunks into different types in order to learn, remember, and retrieve them in an organized way. Another useful activity is the memory-enhancing of lexical chunks, which contributes to students’ vocabulary learning. Students mastered what it means to learn a word. Instead of learning a word’s pronunciation, spelling, and its meaning in Chinese, they learnt a word more thoroughly, by expanding their understanding of words through their definitions, synonyms, antonyms, collocations, grammatical usages, and derivations. This leads to students not only increasing their vocabulary size but also using words more accurately and appropriately in different contexts. Based on the results of the second part of the questionnaire which aimed to explore which aspect of this approach benefited learners the most after receiving instruction in the lexical approach, nearly half of the learners reported that they changed their way to learn and memorize words after learning the lexical approach, and 35% of learners indicated that it facilitated their vocabulary learning. According to the findings of the semi-structured interview, all the participants stated that they had a new understanding of how to learn new words after learning the lexical approach. The interviewees showed that they focused more on the relationships between words, they could understand the meanings of words in different contexts, and they expanded their vocabulary size by learning the derivations of words. Furthermore, they learned some

strategies for handling long and complicated sentences which often present obstacles to reading comprehension that haunt many students. As a result of this approach, they became less afraid of such sentences and knew how to handle them. In addition, practicing activities like cloze tests, retelling, and role-plays helped students familiarize themselves with new language which they could then consolidate into lexical chunks. Finally, the evaluation of words activity helped them assess their learning and further consolidate the newly learned words. Based on the findings of the interview, many participants revealed that they could remember the content of a text better and these activities were beneficial to their vocabulary retention. Therefore, all these learning activities contributed to facilitating students' reading comprehension ability.

Furthermore, the findings of the interview illustrated that when employing the lexical approach to improve their reading, students encountered certain difficulties, such as, they were not accustomed to using the chunk-by-chunk reading method, they could not identify the lexical chunks accurately, they could not classify the lexical chunks, and they had difficulty in memorizing the lexical chunks. The first two problems are related, because some students cannot identify lexical chunks correctly and quickly, so they have trouble in using the chunk-by-chunk reading method. A possible reason might be that their previous word-by-word reading method was so deeply rooted that it was very difficult for them to re-adjust to using this method within a short time. However, with the passage of time and guidance from a teacher, they were able to gradually use the chunk-by-chunk reading method. In terms of the difficulty in identifying the lexical chunks, this might be due to the students' inadequate vocabulary knowledge and low automatic word identification ability. When reading a sentence, they cannot put the relevant words together automatically. Li (2019) and Nishida (2013) also identified this problem with their students. Thus, it is important for students to improve their word recognition skills and chunking ability. Nishida (2013) suggested that "repetitive English reading exercises" (p. 179) could be helpful. Therefore, teachers should train students to read more passages using the chunk-by-chunk reading method and provide further instruction to help their students. Regarding the difficulty of classifying lexical chunks, Lewis (2002) claimed that the boundary of each type of lexical chunk could sometimes be vague, so teachers should aim to help learners record and accumulate the lexical chunks in an organized and convenient way. What is

more important is to develop their awareness of lexical chunks and chunking ability. Concerning the difficulty of memorizing lexical chunks, this is a common problem for all language learners. In the treatment, the teacher taught the students some methods which helped them to retain lexical chunks, which might have alleviated the burden to some extent.

Conclusions and Implications

This study aimed to examine the effects of the lexical approach on Chinese English major students' reading comprehension ability and to investigate their opinions on this approach to reading. The results showed that the lexical approach helped students improve their reading comprehension ability and they developed a positive opinion towards this approach. Thus, it is recommended that the lexical approach should be applied to teaching reading in English in higher education.

These findings have the following implications. Firstly, lexical chunks that are frequently used could be highlighted or annotated, especially for weak students, such as by giving the collocations, synonyms, and words that are similar in appearance. Additionally, newly-acquired knowledge should be recycled since many students indicated that lexical chunks are easy to forget. Secondly, curriculum developers should emphasize the importance of lexical chunks in language learning, especially for elementary school students. Thirdly, with regard to the pedagogical implications, teachers should emphasize the importance of the lexical chunks, cultivate students' awareness of chunks, and help them develop a chunk-by-chunk reading method. The techniques for guessing the meaning of unknown words and handling long and complicated sentences proved effective, so the teaching activities should also be adopted in reading instruction. Finally, this study solely focuses on reading, but other researchers may be able to integrate different English skills with this approach and further explore which skills benefit students the most.

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Appendix

Examples of the Main Teaching Activities

Read the text chunk by chunk (Unit 2 Fourteen Steps Para. 1):

They say/ a cat has nine lives,/ and I am inclined to think/ that possible/ since/ I am now/ living my third life/ and I'm not even a cat./ My first life/ began/ on a clear cold day/ in November 1934,/ when I arrived/ as the sixth of eight children/ of a farming family./ My father died/ when I was 15,/ and we had a hard struggle/ to make a living./ As the children grew up,/ they married,/ leaving/ only one sister/ and myself /to support and care for Mother,/ who became paralyzed/ in her last years/ and died/ while still in her 60s./ My sister/ married/ soon after,/ and I followed her example/ within the year./

Divide the text:

Discourse organizers (Temporal connectors)	Para(s)	Main idea
This was when I began to enjoy <u>my first life</u> .	1–2	The author's first life in which he began to enjoy everything pleasant.
Thus began <u>my second life</u> .	3–5	The author's second life. Because of his disease, he became miserable and frustrated.
I began <u>my third life</u> .	6–8	The author's third life began with the trouble of his car on the stormy night and he described the blind man's selfless help.
<u>To me now</u> , months later...	9–10	The author reflected on the incident and his life philosophy, from which he discovered the true value of life.

Activity 1: Noticing: identify the lexical chunks

Classification of Lexical chunks	Lexical Chunks in the Text
Words and Polywords	Words: arrive, peninsula Polywords: be inclined to, as the sixth of eight children, in her last years, in her 60s, soon after, within the year
Collocations	on a clear cold day, farming family, had a hard struggle, make a living, support, and care for mother, became paralyzed, followed her example, in excellent health,

Institutionalized Utterances
Sentence Frames and Heads

quite a good athlete, became afflicted
 with a disease, motor nerves
 They say a cat has nine lives.
 This was when I began to enjoy my first
 life.

Activity 2: Awareness-raising of lexical chunks

Students classify the lexical chunks first, and then discuss in groups how to compare the lexical chunks that they found; meanwhile, they guess and talk about their meanings with other students.

Activity 3: Understanding details

Reading comprehension strategies: First read the questions and identify the key lexical chunks, then locate the answers in the text. When reading the text, read it chunk by chunk to decode the meaning of the text; meanwhile, connect the textual information with your background knowledge to understand the text.

Example:

Question 1: What can we infer about the author's childhood?

Answer: He lived an unhappy and hard life because of the early death of his father and the poor health of his mother.

Question 2: How did the author's second life begin?

Answer: He was afflicted with a slowly progressive disease of the motor nerves, affecting first his right arm and leg and then his other side.

Activity 4: Memory-enhancing of lexical chunks

How to teach words:

Example:

They say a cat has nine lives, and I am inclined to think that possible since I am now living my third life and I'm not even a cat.
 am inclined to

Definition: be likely or tend to 倾向于

Synonymy: inclined=likely

Co-text: be+ inclined + to do something

Contextualization: (make a sentence)

In the first instance I was inclined to refuse, but then I reconsidered.

He was inclined to give them a free hand.

Association: adj inclinable; n inclination

How to teach long and complex sentences:

Example:

Here hobbled a bitterly disillusioned cripple, a man who held on to his sanity and his wife and his home and his job because of 14 miserable steps leading up to the back door from his garage.

Step 1: break the sentence into several parts based on chunks and sense groups.

Here/ hobbled/ a bitterly disillusioned cripple, a man/ who held on to his sanity/ and his wife/ and his home/ and his job/ because of/ 14 miserable steps/ leading up to the back door/ from his garage.

Step 2: combine grammar knowledge to understand and translate or paraphrase the sentence.

Translation: 这是一个梦想破灭、痛苦失望的残疾人，他跛行着，正是因为有了这条从车库通向后门的可怕的 14 级台阶，他才能保持理智、陪伴妻子、维护家庭、坚持工作。

Paraphrase: Painfully and bitterly, a disabled man hobbled around here. Owing to the 14 miserable steps leading up to the back door from his garage, the man could keep his sanity and his wife and his home and his job.

Activity 5: Practice activities

Cloze: ask students to fill in the blanks based on the text's content.

Example:

They say a cat has nine lives, and I _____ (倾向于) think that possible _____ I am now living my third life and I'm not even a cat. My first life began _____ (在一个清晰寒冷的天) in November 1934, when I _____ as the sixth of eight children of a _____ (农民家庭). My father died when I was 15, and we had a hard struggle to _____ (谋生). As the children grew up, they married, leaving only one sister and myself to support and _____ (照顾) Mother, who _____ in her last years and died while still in her 60s. My sister married _____ (不久之后), and I _____

(跟随) within the year.

This was when I began to enjoy my first life. I was very happy, _____ (身体很好), and quite a good athlete. My wife and I became the parents of two lovely girls. I had a good job in San Jose and a beautiful home up the peninsula in San Carlos. Life was a pleasant dream. Then the dream ended. I _____ (患病) a slowly progressive disease of the motor nerves, _____ first my right arm and leg and then my other side. _____ began my second life.

Answer keys: am inclined to; since; on a clear cold day; arrived; farming family; make a living; care for; became paralyzed; soon after; followed her example; in excellent health; became afflicted with; affecting; Thus

Retelling: Ask students to retell the author's first and second life. The teacher puts key lexical chunks on the screen.

Example:

Born: My first life began...

Family situation: my father died, struggle to make a living, mom paralyzed

Grow up: my sister and I got married

Enjoy my first life: excellent health, lovely kids, a good job; then dream ended; afflict with a disease.

Role-play

Example:

Three people in a group, one plays the author, one plays the little girl, and another plays the old man to show the scene of how the blind old man helped the author change the tire on a rainy and dark night.

Activity 6: Word evaluation

Students work in pairs. Give the lexis list to them to check the newly learned lexical chunks.

Example:

Form	Pronunciation Spelling	Speak it out inclined
Meaning	Form and meaning Referential meaning Associations	倾向于 be likely to Derivations inclination Synonyms/Antonyms likely/tend
Use	Grammatical functions Collocations Register	be inclined to do something / written

Activity 7: Dictation

The teacher reads out the Chinese meanings of polywords and institutionalized utterances, and students need to write the equivalent in English, because the meanings and structure of these two kinds of lexical chunks are almost invariable. As to the collocations, the teacher reads out the main word or says the Chinese meaning, and students are required to write its collocations.

Example:

T: 暗中通知某人

Ss: tip somebody off

T: impression

Ss: distinct impression

Activity 8: Quiz**Example:**

Mr. Easton was _____ in an accident and had to leave his job.

A. hobbled B. crippled C. frail D. fated

Key answer: B.