

Received: January 27, 2018

Revision received: June 27, 2018

Accepted: June 28, 2018

Copyright © 2018 ESTP

[www.estp.com.tr](http://www.estp.com.tr)

DOI 10.12738/estp.2018.6.258 • December 2018 • 18(6) • 3493-3499

*Research Article*

# Effect of English Corpus on Reform of College English Teaching and the Improvement of Students' Vocabulary Competence\*

Song Wang<sup>1</sup>

*Chengdu Medical College*

Xiangfa Zeng<sup>2</sup>

*Chengdu Medical College*

## Abstract

English vocabulary is the basis of language learning. Traditional vocabulary teaching is stereotypical and boring, without sufficient language skills and language knowledge. In this context, the development of corpus provides a platform for the English teaching reform, weakening the defects of traditional vocabulary teaching. Authenticity and practicality of corpus can greatly enhance students' interest in learning. For this, this paper studies the effect of the English corpus on college English teaching reform and the improvement of students' vocabulary competence. The research results show that the implementation of English vocabulary teaching reform based on corpus-assisted platform enhances students' self-learning enthusiasm and increases the internal driving force of students' English learning; through the comparison of the results before and after the corpus teaching experiment, it's found that the in the corpus-based English vocabulary teaching mode, the students' English performance is significantly improved. This study shall provide the theoretical basis for the popularization of corpus in English teaching.

## Keywords

Vocabulary • Corpus • English Teaching Reform • Teaching Mode

\* This work has been supported by Sichuan Foreign Language Literature Research Center & Shanghai Foreign Language Education Press

Project Title: Study on the Corpus-based Teaching Mode of College English Writing

Project No. SCWYH18-04

<sup>1</sup> Chengdu Medical College, Chengdu 610500, China. Email: [wsong80@126.com](mailto:wsong80@126.com).

<sup>2</sup> Correspondence to Xiangfa Zeng, Chengdu Medical College, Chengdu 610500, China. Email: [engxiangfa8888@126.com](mailto:engxiangfa8888@126.com)

English vocabulary is the most basic unit of English language and also an important part of linguistic knowledge. Vocabulary, as the carrier of semantic expression, plays a key role in information transmission (Awal, Ho-Abdullah & Zainudin, 2014). In recent years, with the rapid development of computer technology, the corpus has developed rapidly by means of computer platforms, which has impacted the traditional English teaching mode. The corpus-based English vocabulary teaching has become a new trend (Craig, 2011; Fuyuno, 2013). Different from traditional teaching, the corpus-based innovative teaching mode can optimize educational resources, promote the development of teachers' teaching skills, and improve the way of students' learning (Vieira, 2013). In English vocabulary, the meaning of vocabulary is all-encompassing, and the slight deviation of spelling words can lead to a very big difference in English semantics, which is also the charm of language (Walker, 2011).

There are various teaching methods for English vocabulary, each with its own advantages and disadvantages. The commonly used are explanation, intuitiveness, word-building and word-aggregation methods, but some vocabulary does not follow the law of memory, making it difficult for students to use vocabulary in specific contexts. (Teo, 2017). According to the professional level of English vocabulary, English corpus can be divided into general corpus and professional corpus. Both corpora show large capacity and high practicality. The theory of corpus advocates students to learn knowledge through independent observation and exploration mode, which is a new model applicable to modern foreign language classroom teaching (Tejada, Gallardo, Ferrada & Lopez, 2015). The corpus retrieval tool can help teachers to select the key vocabulary meeting the teaching needs from the corpus. Besides, the data in the corpus improves the recurrence rate of the total new vocabulary during the teaching and thus help students master the vocabulary so as to promote their learning outcome (Demirel & Semin, 2015). In this paper, the effectiveness using English corpus to the reform of college English teaching and the improvement of students' vocabulary competence were studied.

### **Application of corpus in college English teaching**

English corpus teaching is a branch of computer-assisted teaching. The corpus can meet the teaching objectives of teachers and the learning needs of students, and the corpus vocabulary teaching method encourages students to learn knowledge in cooperation (Poole, 2016). Corpus-based vocabulary teaching follows the principles of objectivity, subjectivity, timeliness and gradualism (Lam, 2010). Based on the combination of corpus and traditional vocabulary teaching methods, the new vocabulary teaching method is developed, as an important part of English teaching reform. In this paper, the parallel classes of Nanjing University were investigated and tested, with the experimental period of 4 months. At the earlier stage of the experiment, the questionnaire was conducted to study the use of the corpus by the students; during the experiment, the test was performed to examine the students' effectiveness in learning English vocabulary through the corpus, and also the interviews with teachers and students were made to understand the teaching and learning process.

Questionnaires: Through extracting high frequency keywords of college English, the questionnaires were conducted in four aspects.

Tests: It includes pre-tests and post-tests, with the same difficulty. The advantages of corpus teaching can be found through the comparison of pre- and post-student scores.

Interviews: The interview include student interviews and teacher interviews, both in the one-on-one form. In a timely manner, the feedbacks from teachers and students can be obtained, and the experiment process can be adjusted or modified.

## Analysis and Summary of Experimental Data

### Analysis for the questionnaire results

A total of 120 questionnaires were issued, all of which were valid five-level questionnaires. Through the analysis for the credibility of the overall questionnaire, it was found that each credibility value of the questionnaire was over 0.8 at a higher level. The basic information of the questionnaire includes the English scores of the students. Table 1 lists the English scores of the students. 41.67% of the students think that their English scores are general, more than half think that their English scores are not good, and only 7.5% students think that their English scores are very good. Table 2 lists the KMO value and the Bartlett spherical test of the questionnaire, in which the KMO value of the questionnaire is 0.822, at a good level, while the difference probability of the Bartlett spherical test value is 0, with significant correlation between the data, and factor classified analysis can be performed.

Learning motivation, methods, classroom teaching and mother-tongue thinking are the four factors affecting English learning. Through the T-test analysis of sample data, it is found that girls' learning motivation, learning methods and mother-tongue thinking factors are significantly higher than boys, while boys' classroom teaching factors (the average is 3.3733) is higher than girls (2.9281). Learning methods, classroom teaching, and native mother-tongue thinking have a significant effect on improving English performance.

Table 1  
*English Scores of the Students*

English achievement		Frequency	Percent	Valid percent	Cumulative percent
Valid	Very good	9	7.5%	7.5%	7.5%
	General	50	41.67%	41.67%	50%
	Not good	61	50.83%	50.83%	100%
	Total	120	100%	100%	

Table 2  
*KMO Value of this Questionnaire and Bartlett Spherical Test*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.822
	Approx. Chi-square	928.943
Bartlett's test of sphericity	Df	232
	Sig.	0.000

### Comparative analysis of students' scores before and after the experiment

The student score test was conducted by pre-test and post-test. There were 120 students tested in total from two classes (experimental class and control class respectively), each class for 60 students. The experimental class used the new corpus-based English vocabulary teaching mode, while the control class still followed the traditional teaching mode. Table 3 shows the sample statistic of the pre-test results for the experimental class and the control class, and the average English scores of the experimental class and the control class in the pre-test were 71.47 points and 70.77 respectively. Table 4 lists the pre-test homogeneity test of variance, which clearly indicates no significant differences in the pre-test scores of the experimental and control class. Table 5 shows the sample statistics of the post-test scores for the experimental class and the control class, and the average English scores of the experimental class and the control class were 78.98 points and 72.73 points respectively. The English scores of the experimental class and the control class increase by 7.51 and 1.96 respectively, indicating that the English scores of the experimental classes in the new corpus-based English vocabulary teaching mode have been significantly improved. Table 6 lists the post-test homogeneity test of the variance. It can be clearly seen that there is a significant difference in the post-test scores of the experimental and control classes.

Table 3  
*Sample statistics of pre-test scores in experimental and control classes*

Group statistics					
	Class	N	Mean	Std. Deviation	Std. Error mean
Pretest	Experimental class	60	71.47	9.28135	1.26753
	Control class	60	70.77	9.26248	1.26492

Table 4  
*Pre-test Variance Homogeneity Test*

	F	Sig.	Mean difference	Std. error difference	95% confidence interval of the difference	
					Lower	Upper
Equal variances assumed	0.003	0.965	0.69922	1.81218	-2.86676	4.26301
Equal variances not assumed			0.69922	1.81218	-2.86676	4.26301

Table 5  
*Sample Statistics of Post-test Scores after Experimental and Control Classes*

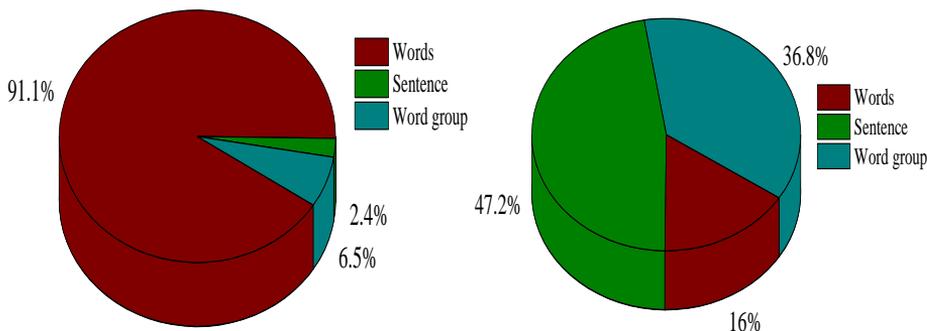
Group statistics					
	Class	N	Mean	Std. Deviation	Std. Error mean
Post-test	Experimental class	60	78.98	8.89378	1.22378
	Control class	60	72.73	9.78763	1.33585

Table 6  
*Post-test Variance Homogeneity Test*

	F	Sig.	Mean difference	Std. error difference	95% confidence interval of the difference	
					Lower	Upper
Equal variances assumed	0.218	0.661	6.16205	1.81484	2.52990	9.76077
Equal variances not assumed			6.16205	1.81484	2.51858	9.76110

### Implementation and effect of English corpus-based teaching

#### English corpus-based teaching effect



(a) Traditional teaching

(b) Corpus English teaching

Figure 1. Comparison of learning methods between traditional teaching and corpus English teaching vocabulary.

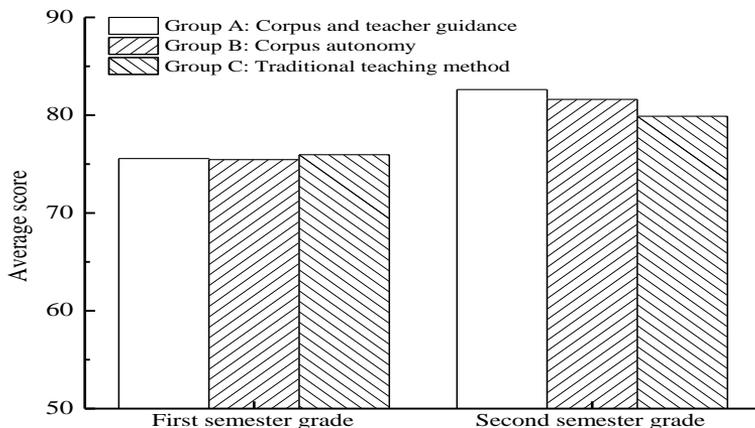


Figure 2. Test score comparison chart before and after the experiment.

Fig.1 compares the vocabulary learning in the traditional teaching and corpus English teaching mode. The traditional simple vocabulary teaching is transformed into sentence and word group teaching, which provides students with an environment to understand words and achieve higher learning results. In this section, the learning outcomes of students after the English teaching reform were mainly analysed by selecting 60 students in the above experimental class. These students were sub-divided into two groups according to their scores. Table 7 lists the comparison table of English scores in the teaching group. The two methods: corpus and teacher guidance-based method and corpus-based student autonomy method were applied for these two groups respectively. The other 60 students in the tradition teaching group in last chapter were taken as the control group. Fig.2 shows the comparison chart of test results before and after the experiment, and the results of the

three groups in the three teaching methods are 7.1, 6.17 and 3.94 respectively after the experiment. It can be seen that after the corpus-based English teaching reform, the students' results are better than in the traditional teaching, their English scores are improved higher, and the new methods are more recognized by students.

Table 7  
*Teaching Group English Score Comparison Table*

Group	Score < 60	Score 60-69	Score 70-79	Score 80-89	Score 90-100
Group 1	3	3	13	8	3
Group 1	3	4	13	6	4

### **Suggestions on the application of corpus in the college English vocabulary teaching**

There exist many problems with the corpus-based English teaching reform in the experiments, mainly in the short teaching experiment time, small experimental capacity, etc. But the effectiveness of the corpus in English vocabulary teaching has also been surely found. English corpus teaching promotes the reform of teaching methods such as students' independent learning and cooperative learning etc., which provides students with a real context, and enables them to acquire vocabulary naturally. Furthermore, the retrieval and analysis functions in the corpus can be applied to assist teachers in determining the difficult and important points of teaching content, promoting the transformation of the teachers' role in the new education reform. At present, corpus has been popularized very slowly in college English vocabulary teaching, since there are many deficiencies in its own application, e.g., the validity of corpus restricts the accuracy of language teaching; many schools have imperfect hardware facilities, so that the corpus-based English teaching reform is in great difficulty. Based on this, in the application of corpus, the education department should organize and establish related corpus for classroom teaching in different stages; the teaching materials reform suitable for corpus-based English teaching should be conducted tentatively; the teaching quality of teachers should be proved by changing their traditional teaching ideas; the layered teaching should be proposed, to ensure that the students of different levels have their own benefits; the application field of the corpus teaching should be extended to integrate with different subdisciplines.

## **Conclusions**

This paper studies the effect of English corpus on college English teaching reform and the improvement of students' vocabulary ability competence, and gives suggestions on the application of corpus in college English vocabulary teaching. The specific conclusions are as follows:

Learning methods, classroom teaching and mother-tongue thinking have a significant effect on the improvement of English scores. After the corpus-based teaching reform, the English scores of the experimental class students have improved significantly, and there is significant difference in the post-test test scores between the experimental class and the control class.

Compared with the tradition teaching mode, the reformed corpus English teaching has better teaching effect, students' English performance is improved, and their recognition is higher, but the validity of corpus restricts

the accuracy of language teaching and the development of English teaching reform. For this, the suggestions were also made from the government, school and teacher levels in this paper.

## References

- Awal, N. M., Ho-Abdullah, I., & Zainudin, I. S. (2014). Parallel corpus as a tool in teaching translation: translating English phrasal verbs into Malay. *Procedia - Social and Behavioral Sciences*, 112, 882-887. <http://dx.doi.org/10.1016/j.sbspro.2014.01.1245>
- Craig, E. (2011). The contribution of descriptive corpus linguistics to English language teaching. *Linguistics & Education*, 22(3), 290-293. <http://dx.doi.org/10.1016/j.linged.2010.12.001>
- Demirel, E. T., & Semin, K. (2015). The comparison of collocation use by Turkish and Asian learners of English: the case of TCSE corpus and icnale corpus. *Procedia - Social and Behavioral Sciences*, 174, 2278-2284. <http://dx.doi.org/10.1016/j.sbspro.2015.01.887>
- Fuyuno, M. (2013). The Usage of Psychological Passives in Spoken and Written English: A Corpus-based Analysis and Implications for English Language Teaching. *Procedia-Social and Behavioral Sciences*, 95, 184-194. <http://dx.doi.org/10.1016/j.sbspro.2013.10.638>
- Lam, P. W. (2010). Discourse particles in corpus data and textbooks: The case of well. *Applied Linguistics*, 31(2), 260-281. <http://dx.doi.org/10.1093/applin/amp026>
- Poole, R. (2016). A corpus-aided approach for the teaching and learning of rhetoric in an undergraduate composition course for 12 writers. *Journal of English for Academic Purposes*, 21, 99-109. <http://dx.doi.org/10.1016/j.jeap.2015.12.003>
- Tejada, M. Z., Gallardo, C. N., Ferradá, M. C. M., & López, M. I. C. (2015). Building a corpus of 21 english for automatic assessment: the clec corpus. *Procedia - Social and Behavioral Sciences*, 198, 515-525. <http://dx.doi.org/10.1016/j.sbspro.2015.07.474>
- Teo, P. (2018). Professionalising teaching: A corpus-based approach to the professional development of teachers in Singapore. *Cambridge Journal of Education*, 48(3), 279-300. <http://dx.doi.org/10.1080/0305764X.2017.1324019>
- Vieira, N. G. S. (2013). Not to teach but give insights: Corpus-based approach in Portuguese-English and Portuguese-Russian cross-linguistic error correction. *Procedia-Social and Behavioral Sciences*, 95, 522-527. <http://dx.doi.org/10.1016/j.sbspro.2013.10.677>
- Walker, C. (2011). How a corpus-based study of the factors which influence collocation can help in the teaching of business English. *English for Specific Purposes*, 30(2), 101-112. <http://dx.doi.org/10.1016/j.esp.2010.12.003>