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An Empirical Study on Application of Frequent Quizzes to Business English Courses

Ping Chen

School of Foreign Languages, Sichuan University of Arts and Science, Dazhou, Sichuan, 635000, China

Abstract—The purpose of this study is to explore the effectiveness of frequent quizzes applied to subject-based business English courses designed for students in Sichuan University of Arts and Science in China. Besides, this study investigates students' views on design, administration, optimizing of quizzes. A total of fourteen quizzes were administered in the teaching practice of a business English course called International Settlement and Documentation, which was offered to two classes of business English majors in one semester. Then, a questionnaire survey was conducted online and 45 students responded to the questionnaire. Findings and analyses were based on the 45 respondents' feedback. The study results show that the students had a positive attitude to the application of quizzes on the whole and the quizzes were effective to a large extent in facilitating their acquisition of relevant business knowledge and language items. The vast majority of students were satisfied with the amount of items in quizzes and administration of quizzes. What needs to be improved on in their views focused on diversity of question types. Recommendations on application of frequent quizzes to English teaching, future research and optimizing quizzes were put forward in the end.

Index Terms—empirical study, quizzes, business English courses, effectiveness

I. INTRODUCTION

In 2015, the Education Ministry of China issued *The National Standard for Teaching Quality of Business English Major at the Tertiary Education Level* and it stipulates that the core courses for business English major encompass courses in English language knowledge and skills, business knowledge and skills, cross-cultural communication and humanity (Lifei Wang, 2015). According to the national standard, it can be safely inferred what distinguishes business English major from English major is, to a great degree, the courses in business knowledge and skills. Therefore, teaching of courses in business knowledge and skills plays an important role in ensuring that the teaching quality of business English major meets the national standard.

Teaching quality can be guaranteed if the teaching objectives are met. Whether teaching objectives are attained is determined to a great extent by teaching process. M. Sercan Uztosun (2006) mentions that testing is the only way to see the efficiency of the teaching process. Besides, Chastain (1988) points out testing enables teachers to understand what can be done to facilitate students' learning. Arthur Hughes (1989) discusses 4 kinds of tests, say, proficiency tests, achievement tests, diagnostic tests and placement tests. He divides achievement tests further into final achievement tests and progress achievement tests. And he proposes that teachers should feel free to set their "pop quizzes" to have a rough check on students' progress and keep students on their toes. J. B. Heaton (1990) discusses 4 types of testes, namely, achievement tests, proficiency tests, aptitude tests and diagnostic tests. Achievement tests can be further divided into class progress tests and standardized achievement tests. He points out class test is a teaching device, its backwash effect on teaching and motivation being important features. In a word, testing and teaching are closely related and testing can be applied to the teaching process to enable the teacher to achieve teaching objectives.

Only a few teaching practitioners both in China and other countries have conducted empirical studies on application of class progress tests or quizzes to college English courses and other college-level courses. Fan Xueying (2013) applied classroom dictation tests to college English teaching in China and found that the tests were effective in enhancing students' linguistic competence to some degree. Ayanna K. Thomas et al (2020) applied frequent quizzes to Cognitive Psychology courses at Tufts University during the Fall 2014 semester and they found that frequent testing promoted long-term retention of college-level course material and they proposed that educators should consider employing this approach. According to these studies, it proves that class progress tests or quizzes are effective in achieving teaching goals and facilitating learning.

However, up to the present, the empirical research in this field is limited in number. As business English has been a relatively newly authorized major in higher education in China and grasping business knowledge and business terms contained in subject-based courses are a challenge for business English majors, it is necessary to conduct research on the application of class progress tests or quizzes to the teaching process to see if the tests will also be effective in promoting students' learning business knowledge as well as English.

II. RESEARCH QUESTIONS

The research aims to address the following 4 research questions.

- 1. Are frequent quizzes effective in promoting student's learning business knowledge in subject-based business English courses?
- 2. Are frequent quizzes effective in promoting student's learning English in subject-based business English courses?
- 3. What is students' feedback on the design of tests, such as length of time for testing, methods of tests, amount of items, etc?
- 4. What are students' suggestions for optimizing the quizzes for future use?

III. RESEARCH METHOD

A. Participants

The participants were the students majoring in business English who took the course in International Settlement and Documentation at Sichuan University of Arts and Science during the second semester of 2018- 2019 academic year. They finished the course in July 2019. The students taking the course were juniors from Class 6 and Class 7, totaling 65 students. 45 students out of them responded to the questionnaire which was distributed through Wenjuanxing (literally questionnaire star), a Chinese online questionnaire survey platform, by the instructor of the course at the beginning of 2020. The main reason for the rest 20 students' not responding to the questionnaire was the large time gap between finishing the course and taking part in the questionnaire survey, which may have resulted in their dwindling enthusiasm in participation in the research. Besides, they may have suffered from anxiety due to the outbreak of COVID-19, so that they ignored the questionnaire survey online. As a result, all analyses were conducted on the 45 students who responded to the questionnaire.

B. Design and Procedure

The teaching objective of the course in International Settlement and Documentation is to enable students to acquire the relevant business knowledge and business English language items, and master the skill of making out various documents involved in international trade. The teaching content focused on relevant business knowledge and business English language items from Week1 to Week14 and the practice of making out documents from Week15 to Week17. In order to promote students' learning of the relevant business knowledge and business English language items, the instructor prepared 14 quizzes and made students take the 14 quizzes from Week 2 to Week15, one quiz per week. Each quiz was designed to check on students' understanding and acquisition of the relevant business knowledge and language items they had been taught in the previous week. For example, the quiz they took on Week 2 was to check on their understanding and acquisition of business knowledge and language items they had been taught in Week1.

As for the testing methods, the 14 quizzes consisted of 4 types of questions, namely, blank filling for business knowledge, true or false questions for business knowledge, blank filling for process of various payment methods, Chinese-English or English-Chinese translation for business English terms, with each quiz composed of some of the four questions. Each quiz consisted of around 30 items in total, depending on the amount and difficulty of teaching content and all the items were kept on one sheet of A4 paper. Sample Quiz 1 is available in Appendix. As Heaton (1990) mentions that a good class progress test should encourage students to perform well in the target language and to gain additional confidence, the total score for each quiz was designed to be 100 points, of which each item was 2 points and the rest points were assigned to students automatically with the purpose of encouraging students to learn and making them have additional confidence. Take Quiz 1, there are 25 items accounting for 50 points and the other 50 points are assigned to students automatically. If the student gets one item wrong, the student will get 98 points.

As for the procedure of quiz taking and marking of quizzes, the students took each quiz in the paper-and-pencil form at the very beginning of each lecture for 8 minutes from Week 2 to Week 15, and after they finished each quiz, they would immediately exchange the quiz papers with their deskmates to mark the quiz papers, with the instructor giving explanation of each item to the students for about 7 minutes. Then the instructor would collect all the quiz papers and see what the students did well and poorly in the quiz after class and offer corresponding feedback in the following week.

IV. FINDINGS AND DISCUSSION

There are seventeen closed questions and one open-ended question in the questionnaire. These questions are divided into five types regarding students' demographic information, their overall view on and attitude to quizzes, effectiveness of quizzes, their feedback on the design and administration of quizzes, and their suggestions on optimizing the design of quizzes for future use.

A. Students' Demographic Information and Their Overall View on Quizzes

As for the gender ratio of respondents, the result shows that 40 female students and 5 male students responded to the online questionnaire. With regard to students' overall view on quizzes, all the students thought it was necessary to take quizzes. 46.67% of the students thought the degree of necessity of taking quizzes was very high, 37.78% of them thought the degree was high, and the rest of them thought the degree was moderate. The main reason for this result is to a large degree related to the new and difficult business knowledge and terms of the subject-based business English

course, International Settlement and Documentation. By taking quizzes, students may better grasp the teaching content. Besides, quizzes can add some variety to teaching process, which may stimulate students' interest and enhance their initiative. As a result, the students thought it was necessary to take quizzes.

B. Students' Attitude to Quizzes

Three questions about students' preparation for quizzes, their participation in quizzes, and their propensity for recommending quizzes for future use were designed to determine students' general attitude to quizzes. As for their preparation of quizzes, the vast majority of students prepared for quizzes. 62.22% of students prepared for most of the quizzes, 15.56% of them prepared for all the quizzes, another 15.56% of them sometimes prepared for quizzes, and only 6.66% of them hardly ever or never prepared for the quizzes. The data demonstrates the vast majority of students took the quizzes seriously and had a positive attitude to quizzes. The main reason is that most of students had a positive attitude to study on the whole based on the instructor's regular observation of the students' performance in class. And they knew the importance of this course, for it is closely related to their future career development. It is natural and understandable for them to transfer a positive attitude from study to quizzes. However, not all the students prepared for all the quizzes mainly because some of them have a tight schedule for after-class activities and therefore have no sufficient time for preparation for each quiz. Furthermore, very few students hardly ever or never prepared for quizzes mainly because such students had a negative attitude to study on the whole or the quizzes might have been too difficult for them, so they gave up trying.

With regard to their participation in quizzes, the result shows all the students took quizzes. 64.44% of them took all the quizzes, 33.33% of them took most of the quizzes and only 2.22% of them took less than half of the quizzes. It can also be inferred that the vast majority of students had a positive attitude to quizzes. The fact that some of students missed some of quizzes is largely accounted for by their asking for sick leaves or personal leaves. What's more, very few students with a negative attitude to study skipped classes occasionally, so they missed some of the quizzes. As for students' propensity for recommending quizzes for future use in classroom instruction, all the students recommended the instructor apply quizzes in future classroom instruction. 44.44% of the students very strongly recommended quizzes for future use, another 44% of them strongly recommended so, and the rest 11.11% of them moderately recommended so. The result further indicates that the students had a positive attitude to quizzes, which may due in a large part to their experience in benefiting from taking quizzes and their recognition of the effectiveness of quizzes in facilitating their acquisition of business knowledge and their English learning as well.

C. Effectiveness of Quizzes

In respect of effectiveness of quizzes, six questions were designed to solicit the students for their opinions. Firstly, as for their scores in the quizzes, 91.12% of students' scores usually ranged from 100 to 80, and the rest 8.8% of students usually scored below 80. The data indicates that the vast majority of students did well in the quizzes, which can be accounted for by their positive attitude to and preparation for the quizzes to a large extent. However, very few students scored relatively low marks, which may be due mainly to their negative attitude to the quizzes and lack of preparation. Secondly, as far as the overall effectiveness of quizzes is concerned, all the students thought the quizzes were helpful for them to learn the course. 33.33% of the students thought the quizzes to be extremely helpful, 44.44% of them thought the quizzes to be very helpful, and the rest of them thought quizzes to be moderately helpful.

Thirdly, when it comes to effectiveness of different types of questions in facilitating students' acquisition of business knowledge and English learning, four questions were designed to solicit students for their opinions. As for the question type of blank filling regarding business knowledge, the percentages of students who considered this question type extremely and very helpful were 48.89% and 42.22% respectively. Only 2.22% of the students thought this question type to be somewhat helpful. The result shows this question type was very effective on the whole. As for true or false question regarding business knowledge, 37.78% of the students thought it to be extremely helpful, 42.22% of them thought it very helpful and the rest students thought it moderately helpful. The data obviously indicates that this question type was also effective.

With regard to the question type of blank filling regarding procedures of various payment methods, 42.22% of the students thought it to be extremely helpful, 35.56% of them thought it to be very helpful and only 2.22% of them thought it to be of little help. Evidently, the data demonstrates that this question type was effective. As for the question type of Chinese-English or English-Chinese translation of terms, 53.33% of the students considered it to be extremely helpful, 37.78% of them thought it very helpful and the rest students thought it moderately helpful. The result also shows this question type was effective.

Of the four questions types mentioned above, the question types which the students thought to be extremely and very helpful were Chinese-English or English-Chinese translation, blank filling regarding business knowledge, true or false question regarding business knowledge and blank filling regarding the procedures of various payment methods in descending order of percentages. This result may reflect that students still attached great importance to English language learning when taking this course even though they knew the focus of the course was more on acquisition of relevant business knowledge and mastery of relevant business skills.

D. Students' Feedback on the Design and Administration of Quizzes

When it comes to the students' feedback on the design and administration of quizzes, three questions were designed to collect students' opinions. As for the diversity of questions types, the largest number of students who accounted for 46.67% thought that the degree of diversity was moderate, with 22.22% and 31.11% of the students thinking the degree to be extremely high and very high respectively. This result is very likely caused by the fact that there were four question types only in quizzes. As is mentioned in research design section, each quiz consisted of around 30 items in total, depending on the amount and difficulty of teaching content and all the items were kept on one sheet of A4 paper. The result shows that the vast majority of students accounting for 68.89% thought the amount of items was moderate, with the rest students thinking the amount was extremely large or very large. As for the administration of quizzes, it is mentioned above that eight minute were allowed for students to finish each quiz and seven more minutes were for students' marking the quiz with the instructor giving answers and explanations when necessary. The result shows that 28.89% of the students thought the amount of time for administration of quizzes was extremely appropriate and 31.33% of them thought it was very appropriate, with the rest students thinking it moderately appropriate. It is evident most of the students were satisfied with the time allocated for administration of quizzes. This result may be accounted for by the fact that administration of each quiz only accounted for about 16% of the total teaching time for two periods of this course per week from Week 2 to Week 15. The time for teaching new content each week was still guaranteed.

E. Students' Suggestions' on Optimizing Quizzes for Future Use

When it comes to the students' suggestion on optimizing the design and administration of quizzes, 3 questions were designed to solicit students for their opinions. As for the suggestions on question types, the students agreed with adding some question types, such as, short-answer question, matching, making out documents, sequencing question, etc. And the question types the students preferred to add focused on making out document, matching, and short-answer question. The data shows 66.67% of the students preferred to add the question type of making out documents, with 60% of them preferring to add short-answer question and matching. It is understandable that greater diversity of question types can better hold students' interest in quizzes and draw their attention to quizzes. Besides, the reason for students' preference for making out document is mainly due to the fact that making out documents is a vital business skill for them to master even though making out documents is the teaching focus of the final stage of the course from Week 15 to Week 17. As for the amount of items, the vast majority of the students accounting for 86.67% thought there was no need to alter the amount, with the rest 13.33% of them agreeing with moderate reduction in the amount of items. The reason for a few students' supporting reducing the amount of items may be that very few students with relatively weak English proficiency found it hard to finish all the items in a quiz on time or that very few students with superior English proficiency found it unnecessary to maintain the amount of items and thought fewer items would not impact the effectiveness of quizzes. As for time allocated for administration of quizzes, 68.89% of the students agreed to keep the arrangement unchanged, while 28.89% of them agreed to reduce the time moderately, with the rest 2.22% agreeing to increase the time moderately. The result shows for most of the students the allocated amount of time was appropriate. The reason for some students' suggestion of reducing the time may be that their English proficiency was relatively high, they prepared for the quizzes fully, and they could finish the quizzes sooner. And the very few students suggested increasing the amount of time probably because their English proficiency was lower and they did not understand what was taught in class to a large extent. Besides, they may not have prepared for quizzes fully. Therefore they may have found it a bit hard to finish the quizzes within given time periods and preferred to be allowed more time for quizzes.

V. CONCLUSIONS

The study shows that frequent quizzes applied to subject-based business English course were effective on the whole. All the participants thought it necessary to take quizzes and the vast majority of them had a positive attitude to the quizzes, which was to a large degree reflected by the fact that most of them prepared for the quizzes. Also, the vast majority of them did well in the quizzes, which shows they acquired relevant business knowledge and language items. All the participants considered the quizzes to be helpful for them to learn the course. Of the four questions types in the quizzes, blank filling regarding business knowledge, blank filling regarding procedure of various documents, true or false question were effective in facilitating the participants' acquisition of business knowledge to a great degree, and the Chinese-English or English-Chinese translation helped them master the English language items a great deal. The participants' stronger preference for the question type of translation showed that they attached great importance to English language learning to some degree despite the fact that the focus of this course is more on the relevant business knowledge and skills. As for the design and administration, the vast majority of participants were satisfied with the amount of items and time allocated for the quizzes. What's worth improving on is the diversity of question types.

In a word, application of frequent quizzes in subject-based business English courses is effective in facilitating business English majors in acquiring relevant business knowledge and language items to a great extent.

VI. RECOMMENDATIONS

Some recommendations on application of quizzes to English teaching practice, future research on application of quizzes, and optimizing quizzes are put forward as follows:

A. Recommendations on Application of Quizzes to English Teaching

As is shown in the results of this study, quizzes are effective ways to help students acquire both subject knowledge and English language items. It is suggested that quizzes should be applied to a larger variety of subject-based English courses especially designed for business English majors, such as, English for International Marketing, English for International Negotiation, International Trade Theory and Practice, etc., because these courses are interdisciplinary and contain lots of subject knowledge which is totally new to business English majors and it is highly challenging for them to understand and acquire the relevant knowledge. By means of quizzes, the teacher can better achieve teaching objectives and students can better acquire the subject knowledge as well as relevant language items, because by designing quizzes, the teacher will be more conscious of the teaching objectives and the focus of teaching content, and by preparing for and taking quizzes, the students can pay more attention to the focus of teaching content and consolidate the subject knowledge and language items as well.

The recommendation above also applies to the knowledge-based English courses especially for general English majors, such as, general linguistics, English lexicology, English stylistics, American Literature, British Literature etc. The reason is that these courses contain lots of knowledge regarding English language itself or literature, part of which is new to English majors and difficult for them to acquire, even though these courses are not interdisciplinary. With the use of quizzes, students can acquire the relevant knowledge better.

B. Recommendations on Future Research on Application of Quizzes

In view of the fact that there have been a very limited number of empirical studies on application of quizzes to English teaching in so far, firstly it is strongly recommended that more empirical research on application of quizzes to English teaching should be conducted. Secondly, research methods can be diversified in future research. For example, more qualitative and quantitative methods can be applied, such as, interview, focus group survey, experiment, etc. As a result, findings of research will be more comprehensive and provide more insights into the application of quizzes. Thirdly, as this study only focused on the effectiveness of quizzes, future research can focus on more diverse topics, such as the backwash effect of quizzes on English learners. What's more, it is recommended that future research be conducted based on a larger sample of subjects. As long as more empirical research on application of quizzes is conducted, more insights into application of quizzes can be available and provide English teaching practice with implication and better frame of reference.

C. Recommendations on Optimizing Quizzes

As for recommendation for optimizing quizzes, it is suggested that the general principle that quizzes should be based on the teaching content and objectives should be followed. In terms of question types, diversity should be taken into consideration and it may be advisable that students should be involved in determining the question types before the actual application of quizzes to teaching practice. In this way, students' needs can be better met and their initiative can be better stimulated. As for the amount of items of quizzes, it is desirable to keep all the items on one sheet of A4 paper. In this way, both the teacher and the students can focus on the core teaching content and the essential knowledge and language items, which may also keep the workload for teacher's design of quizzes and students' preparation for quizzes at a reasonable level. Finally, the decision on time allocated for administration of quizzes can be made collaboratively by the teacher and the students before actual application of quizzes and the decision may be adjusted according to students' feedback after the actual application for a couple of times. In other words, when it comes to the times allocated for administration of quizzes, flexibility and dynamic adjustment should be taken into account.

APPENDIX

Sample Q	uiz 1
Class:	
Student's	Name:
Date:	
I. Fill in	the blanks with proper information.
	International settlement refers to activities among countries in which
	are made and are transferred in order to settle accounts, debts and
2.	Payments for goods fall into the category of international
	Settlement while payments for services fall into international settlement.
	Overseas remittance is categorized as transfer of
	Methods of payment include remittance, collection, L/C, bank, factoring and
6.	In the 18th century, banks began to engage in exchange transactions.
7.	Bill of lading is an important document because it can serve as a cargo receipt, a contract and
	to goods.
8.	SWIFT is a message or communication system, CHIPS is a private clearing
	system, and is a real-time clearing system.

- II. Translate the following terms into Chinese.
 - 1. cash on delivery
 - 2. cash on shipment
 - 3. factoring
 - 4. forfaiting
- III. Supply English equivalents for the following terms.
 - 1. 完税后交货
 - 2. 工厂交货
 - 3. 船上交货
 - 4. 到岸价

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Ping Chen was born in Dazhou, Sichuan, China in 1979. She obtained her Master's Degree in Foreign Linguistics and Applied linguistics from Chongqing University in China in 2012. She is currently a lecturer in School of Foreign Languages of Sichuan University of Arts and Science. Her current research interests include cognitive linguistics and English teaching.