A study of e-learning in an English language course for university students

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Abstract

This study looks at the effect of an e-learning system employed in an English language course, "Practical Business English I". The aims of the course were: (1) to familiarise students with the practical use of basic business English including learning vocabulary and expressions used in various business situations; (2) to introduce the study for the "Test of English for International Communication" (refereed to as the TOEIC® TEST); and (3) for students to increase their score by between 100 and 150 points relevant to their score at the start of the course; and (4) for students to obtain around 400 to 450 TOEIC® IP [1] by the end of the course.

At the start of the course, all students took a placement test. Students who scored between 250 between 380 points were expected to have a score of around 300 in the TOEIC® TEST. These students were selected to participate in the course. The course employed both an e-learning system which allowed students to learn using software applications, and traditional classroom instruction. The results of this course indicate that e-learning seems to benefit some but not all students. The individual learning style of each student has a significant effect on whether or not students will use the e-learning system.

1. Introduction

"Practical Business English I" is an introductory course for students to gain fundamental business English communication skills. This course, offered by the Faculty of Economics at Osaka University of Law and Economics, commenced in 2012. The course has three specific purposes: (1) to familiarise students with the practical use of fundamental business English including learning vocabulary and expressions used in various business settings; (2) to introduce the TOEIC® TEST; and (3) for students to increase their score by

at least 100 to 150 points compared to their placement test score, or to obtain a score of between 400 and 450 TOEIC® IP by the end of the course. The TOEIC® TEST was conceived in Japan and developed by the Educational Testing Service (ETS), a U.S. nonprofit test development institution. The TOEIC® TEST was developed as a common standard to measure English language skills. The test scores from 10 to 990. It comprises two sections: listening and reading. There are one hundred questions in each section. In the listening section, examinees listen to a variety of questions and short conversations, and then answer questions based on what they heard. The listening section consists of four parts, 45 minutes, which are based on: (1) photographs (10 questions); (2) question-response (30 questions); (3) short conversations (30 questions); and (4) short-talks (30 questions). In the reading section, examinees read a variety of materials and respond at their own pace to questions based on the content. Examinees have 75 minutes to complete the reading section which consists of three parts based on: (1) incomplete sentence (40 questions); (2) text completion (12 questions); and (3) reading comprehension (28 of single passage and 20 of double passage questions).

At the beginning of the course, a placement test was conducted to select students whose English proficiency was approximately equivalent to a score of 300 in the TOEIC® IP.

To realise the aims of the course, the course combined two learning methods. Students attended one 90 minute class each week for 15 weeks for face-to-face instruction. In addition, students learned using computers and personal terminals such as smartphones or tablets, so called e-learning system [2]. The combination of learning in the classroom and e-learning was applied to maximise the students' qualitative and quantitative learning

environments. To achieve an increase of a students' score by 100 points, at the level of a total score of between 300 to 400 points requires learners to complete 200 to 400 hours of intensive study (Kano: 2008). E-learning was introduced to enhance qualitative and quantitative learning environments for the students.

2. Course materials

2.1. Textbook

The textbook for the course was "Sucsessful Keys to the TOEIC Test 1 Second Edition (2010)", which is designed for students targeting 500 in the TOEIC® TEST. Although the target score of the book is higher than the target for students to achieve by the end of the course, the book provides practical exercises for beginner level students of English. It introduces fundamental vocabularies and expressions, key grammatical structures as well as authentic listening exercises. Each of the 15 units has four listening exercises in exactly the same format as the TOEIC® TEST (i.e. photographs, question-response, short conversations, and short-talks). Each unit focuses on a particular topic to enhance students' practical English usage as well as familiarising students with the format of the test.

2.2. Online e-learning system

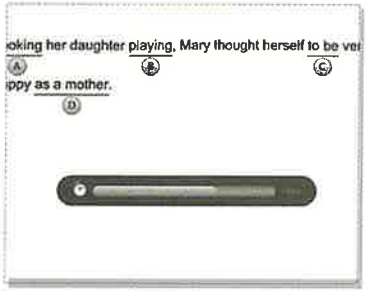
Online software was used for students to maximise their learning opportunies outside of the classroom and to help achieve the goals of the course[3]. Prior to the second class, students were registered to use the online software.

In the second class, students were given an explanation of how to access the software through the University's IT system (I-navi), and were able to do so using their laptop computers. The students were notified that their use

of the software would be closely monitored and the level of use would form part of the assessment for their course grade. Paper based quizzes, related to components of the software, were conducted once every two weeks to assist students to develop their self-study routine using the software.

The software used in the course aims for learners to obtain a score of 470 in the TOEIC® TEST. The content has three components: listening; reading; and vocabulary. There are 12 units. The listening and reading section has quizzes after every three units.

"quick reading"



読解スピードを強化する瞬発力トレーニング

10秒という短い制限時間内に問題を解くという訓練を繰り返すことで、TOEICスコアアップの重要なポイントである長文問題にも必要となる実践的な読解スピードを養います。

"dictation and typing"

音声を聞いて入力していくディクテーション学習

キーフレーズを含んだ例文を、音声で聞いたそのままをキーボード入力していくディクテーション学習を行なってリスニング力を向上させます。

"memorising key phrase by typing"

指でも覚える キーフレーズ学習

キーフレーズ学習では、文字を読んだり音声を聞いたりするだけでなく、キーボード入力を繰り返し行なうことで、キーフレーズを指でも覚えていきます。

"quiz for reading"

学習ユニットの最後には、TOEIC形式の問題練習

リスニングとリーディング、それぞれすべての学習ユニットの最後には、TOEIC形式問題の練習を行ないます。各ユニット全問正解するまで繰り返し答えます。

Figure 1. Sample images of the software content used in this course [4]

The software is designed for learners to actively engage in their learning. For example, in the listening section learners must type the key phrase in dictation exercises. In the reading section some exercises require learners to answer within ten-seconds; the purpose being to encourage a quick and correct response. The software was used at the very end of each class giving students an opportunity to ask questions directly relating to the content as well as on systemic problems they may have in the course.

2.3. Learning through free learning application

During the course students were encouraged to use a smartphone application, "English Upgrader®". This is a free application produced by the Institute for International Business Communication, which organises the TOEIC® TEST. In the second week of the course students were asked to install the application. Any students who did not have a smartphone were provided with a personal terminal/tablet, which were applicable to the Android, by the University so that they could access the application.

"introduction"

"marking the tasks completed"

"conversation with English subtitle"

"questions on the conversation"

Figure 2. Sample images of the smartphone application content[5]

The application is based on conversations which are often carried out both in business situations and everyday-life. The application provides an explanation of the phrases used in the conversation followed by questions to check comprehension. The application includes 12 episodes, and the script of the conversation can be displayed in both English or Japanese while the conversation is played. Students are encouraged to use the application mainly to get used to the speed of conversation by native speakers of English and building their lexical knowledge.

3. Structure of the classroom activities

The course has combined learning methods of using textbook, and e-learning components.

Students bring their laptop computers to the classroom. The class starts with a quiz based on the content of the software, and students move onto using the textbook which is similar in format to the TOEIC® TEST but modified for beginner level students. At the end of the class students access the software and learn by using it. This is to give students the opportunity to ask questions related to the software content as well as to obtain assistance with any technical problems they may have. It also functions to form a routine of e-learning at the initial stage of the course.

The frequency of the paper-based quiz in the classroom was reduced once students were familiar with the system. Students' access and progress using the software was closely monitored individually and students were encouraged to complete the content of the software.

4. Student's results

In this study to examine the effect of the e-learning, special attention was

given to: the score in the placement test; rate of the progress to complete the software; and the students' final performance at TOEIC® IP test.

A group of students who completed between 60 and 100 percent of the contents of the software are categorised as "Sofware-high-users" (hereafter, S-HU), and the group of students who completed 40 percent or less of the software contents are described as "Software-low-users" (hereafter S-LU). The categories of S-HU and S-LU played an important role in this study. They are examined from different perspectives together with their score in the placement test and their score in the final TOEIC® IP test. Students in the category of S-HU established a routine of utilising the software for their study. On the other hand, the students belonging to S-LU did not form a routine of studying using the e-learning system.

The following table shows the details of individual students' performances related to: (1) their placement test score; (2) categories of score (i.e. more or less than 300); (3) final score in the TOEIC® IP test; (4) the percentage use of progress of the software; (5) how much their score changed relative to their score in the placement test and TOEIC® IP; (6) usage of the software (i.e. S-HU or S-LU); and (7) increased score on average among the certain groups.

		Less/more than 300	Final Score	Progress rate of the software	Change in score	S-HU / S-LU	
	Score of placement (A)		TOEIC® IP (B)	Prog.of SW (%)	Increased score points (B-A)		Average of increased score in each category
S1	245	less than300	335	6	95	Software-low-user	
S5	280	less than300	390	20	100	Software-low-user	
S2	250	less than300	275	31	25	Software-low-user	
S6	290	less than300	395	40	105	Software-low-user	81.25
S13	290	less than300	350	77	60	Software-high-user	
S10	250	less than300	305	79	55	Software-high-user	
S11	260	less than300	375	79	125	Software-high-user	
S12	290	less than300	335	100	45	Software-high-user	71.25
S4	320	more than 300	410	0	90	Software-low-user	
S7	330	more than 300	420	0	110	Software-low-user	
S3	300	more than 300	460	4	160	Software-low-user	
S8	350	more than 300	420	20	70	Software-low-user	
S9	350	more than 300	450	20	100	Software-low-user	106.00
S19	330	more than 300	485	63	155	Software-high-user	
S21	380	more than 300	560	83	180	Software-high-user	
S16	330	more than 300	460	84	130	Software-high-user	
S14	300	more than 300	440	100	140	Software-high-user	
S17	300	more than 300	410	100	110	Software-high-user	
S15	320	more than 300	555	100	235	Software-high-user	
S18	320	more than 300	365	100	45	Software-high-user	
S20	330	more than 300	500	100	170	Software-high-user	145.63

Table 1. The details of individual students' performances

5. Analysis

The effect of the application for smartphones and personal tablets at the beginning of the course, is not determined as it was not possible to monitor students' use of the application.

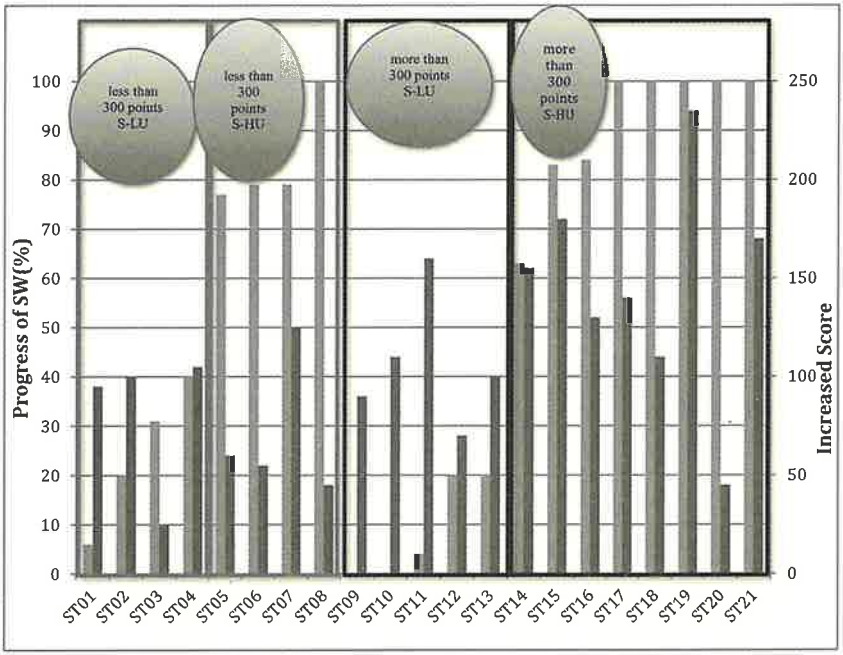


Figure 3. Score in the placement test and level of software use

Twenty-one eligible students made up this study. All 21 students, successfully completed the course and improved their TOEIC® IP score compared to their placement test score. The actual number of points increased by each student was calculated by comparing their two test scores (i.e. the placement test and the TOEIC® IP). Among the 21 students the smallest increased score was 25 points and the largest increased score was 235 points.

Eight students scored less than 300 in the placement test. Of these four were in the S-LU group and four were in the S-HU group.

Compared to the placement test, on average, students in S-HU increased

their score by 71.25 points in TOEIC® IP. Whereas, students in S-LU group increased their score by 81.25 points on average.

Thirteen students scored more than 300 points at the placement test.

Of the thirteen students, eight were S-HU and five were S-LU. Students in the S-HU category increased their score by 145.63. Students in the S-LU group increased their score by 106.0 points.

6. Implications

By the end of the course all students achieved an increase in their score when the scores of placement test and points in TOEIC® IP were compared.

However, students with more than 300 points in the placement test were more likely to achieve at least one of the aims of this course; scoring more than 400 points in TOEIC® IP, or increasing their score by 100 to 150 points. Twelve students out of 13 students, whose score was more than 300, obtained more than 400 points in the TOEIC® IP (92 percent). Table 1 (above) shows that students who scored more than 300 in their placement test and who established a routine of e-learning (S-HU) achieved the best results amongst all student. On the other hand, students who scored more than 300 points, but did not establish an e-learning routine (S-LU), also achieved a score of over 400 or more points in the TOEIC® IP test.

All students whose scores in the placement test were less than 300 were unable to achieve 400 points in the TOEIC® IP. This was regardless of their level of use of the software (i.e. S-HU and S-LU). There is no apparent positive effect of e-learning amongst this group of students.

Achieving a score 300 points in the placement test seems to be a crucial factor for student obtain a score of 400 TOEIC® IP points by the end of the course.

It seems that 300 points is the dividing score amongst students and it may indicate whether a student is equipped with fundamental knowledge of English including grammar and vocabulary. Without fundamental knowledge it seems difficult for students to attain a score of 400 points within a period of a one-semester course (one 90 minute class for 15 weeks), as they need to build their basic understanding of English. Whereas, students who already have this fundamental knowledge appear to be able to expand their comprehension level, often by using the e-learning system.

The e-learning system seems to best suit students who are already equipped with the fundamental knowledge to improve their TOEIC® IP score after 15 weeks of study. It does not seem to have significant effects, in terms of increasing the final scores amongst students lacking fundamental knowledge.

The result of the final score is also heavily influenced by individual student's learning motivation as well as their attitude towards autonomous learning. Among the 13 students who achieved the aims of the course, five students actively chose not to use the e-learning system yet they continued to have strong motivation and achieved the goals of the course.

7. Conclusions

This English language course combined an e-learning system and classroom instruction and was designed to be a preparatory course for TOEIC® TEST. Through the course students learned practical business English. The course

aims were to: (1) increase students score by between 100 and 150 above their score in the placement test; or (2) for students to achieve 400 or more in the TOEIC® IP test at the end of the course. This study focused on the results of the course and in particular the effectiveness of e-learning to assist students attain these objectives.

There were 21 students in this study. All students who participated in this course obtained higher score in TOEIC® IP test at the end of the course relative to their placement test. However, some students could not accomplish either of the targets (i.e. 400 points in TOEIC® IP test, or increasing their score by 100 to 150 above their placement test score). Of the students who could not meet either of the targets, five were students who scored less than 300 points in their placement test.

Except for one student all the students who scored more than 300 points in their placement test could meet at least one of the targets of this course. Those students who scored more than 300 in their placement test and also completed more than 60 percent of the software content succeeded in increasing their TOEIC® IP score.

From the data obtained, the software used in this course suited students who scored more then 300 points in their placement test, and formed the routine of using the software. The data indicates that using the software did not facilitate learning for students who scored less than 300 points in their placement test. Obtaining a score of 300 in the placement test was crucial for students success in this course. It may indicate that a placement test score of around 300 points is the boundary of the students' level of English comprehension. The software used in this course seemed to benefit students who had fundamental understanding of English.

To motivate students to use the software and participate in the e-learning system was a difficult element of this course. Nine students out of 21 students (43 percent) decided not to utilise the software for self-study, and five students among this group achieved one of the targets of the course. They were aware that e-learning was part of the assessment and continuously encouraged to use the software. Still, they decided not to use the e-learning system and only participated in the classroom activities and other forms of self-study.

Some students reported they decided not to utilise the e-learning system as it did not match their learning style. Others reported that the software content was unattractive and tedious.

The active decision made by the students to establish their own learning style should be recognised as a positive attitude towards learning. Therefore, one style of learning should not be imposed on an autonomous learner with a high level of motivation.

For the students who found the software contents unattractive, it may be that the level of the software content was too difficult for them. The content of the software may need to be altered for those students. The content of the software may need to be improved to be more attractive and user friendly.

Through this study, positive effects of the software were found. Also it sheds light on the limitation of e-learning including the use of software applications.

Appendix

Proficiency Scale of the TOEIC® TEST

Proficiency Scale of the TOEIC® TEST Score is drawn up by the Institute for International Business Communication.

Level A (860 and above): "Speakers have sufficient comprehensions for English conversations as a non-native speaker of English." Speakers are able to understand and respond appropriately, based upon their experiences. Even for the topics which are not speakers' areas of expertise, they still have solid understanding and ability to use appropriate expressions. There are some degrees of differences among those speakers and native speakers of English, although they have a good command of English, in terms of vocabularies, grammatical and syntactical understanding, and fluency.

Level B (730 and above): "Speakers are equipped with solid foundation of the appropriate communication in various circumstances." The speakers have full comprehension of conversation and respond promptly during their discourse. They are capable of having conversations, which contain specific topics or fields, and also they are capable to carry out their business using English without having obstacles. Although the accuracy and fluency of the communication ability varies among individuals, grammatical and syntactical errors made by the speakers are not hindering the communication.

Level C (470 and above) "Speakers have ability to fulfill their needs occurring their daily life using English. They are also capable to attend their business within the limited categories." The speakers comprehend the gist of conversation without having obstacles and they can respond in the normal conversation. The accuracy of the communication varies among the speakers when the situations involve complicated matters. Notwithstanding having the lack of ability of expressing themselves, the speakers have fundamental grammar and syntax structure, they are equipped with the vocabularies which enable them to convey their intension.

Level D (220 and above): "Speakers have minimum ability to communicate in English." Speakers can have simple conversation if an interlocutor modifies or repeats their speech. Speakers are able to respond where the topics of the conversation are familiar to them. If the interlocutor provides special consideration as non-English native speaker, speakers can convey their message using insufficient vocabularies, grammar and sentence structures.

Level E (under 220): "Speakers are not capable to communicate in English." Speakers have only fragmental understanding of the conversation even if the speech is done in a moderate speed. The actual communication is not taken place while speakers utter vocabularies in the fragmental order.

References

Kano, Haruo (1998) TOEIC® TEST 英語学習ダイアリー　千田潤一監修　丸善株式会社

Mizumoto, Atsushi and Stafford, Mark (2010) Successful Keys to the TOEIC Test 1 (Second Edition) PEARSON KURIHARA

Note

1 TOEIC® TEST for the Institutional Program

2 Also called "web-based-learning" with the broad meaning that learners utilise online/ internet based information and communication technology.

3 「TOEIC TEST 完全達成470」(株式会社アスク)

4 http://www.ask-digital.biz/leaflet_pdf/toeic.pdf

5 http://square.toeic.or.jp/kyouzai/englishupgrader/appli/01