

Introducing E-learning to Lower Level Learners of English: A Preliminary Study

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要旨

本稿は大学の授業における下位英語学習者へのe-learning教材導入の有効性及びその効果的活用方法を検証し考察するものである。E-learning導入後のTOEICスコア変化と自律学習アンケート結果を、統制群を用いて比較検証した。その結果、distance learningモデルである実験群では、TOEICスコアに大きな伸びがみられたが、GTECテストを用いた統制群では、実験群のような著しい伸びは認められなかった。また、実験群では自律学習のアンケート結果から「意識要因」の*Motivation*と*Ideal-Self*の値が微増していることが分かった。本研究は学内COE教育支援経費を受けての予備調査であるものの、教員の適切な指導と助言があれば、下位英語学習者へのdistance learningモデルにおいて効果的にe-learning教材が活用出来ることを示唆している。

Key words: e-learning, motivation, autonomy, distance learning, English proficiency tests

1. Introduction

When thinking about general compulsory English classes at universities in Japan, the traditional classroom comes to mind with the teacher leading the class, using a textbook, and arranging students in pairs to practice model conversations. In reality, however, non-English major students in those courses seem to show little motivation for learning more (Brown, Campbell & Weatherford, 2008). Another factor which can exacerbate the problem is that their English proficiency is not usually at an advanced level from the start. With recent developments in technology and its use in language learning, we felt it was time to re-think the traditional classroom model and explore different pedagogical options for having students engage in the classroom more actively. In particular, we can see an increased availability of various e-learning computer programs for both self-study and classroom use. As pointed out in the literature thus far (e.g., Warschauer, Turbee & Roberts, 1996), flexibility and a learner-centered teaching approach can be considered as major advantages of e-learning programs and materials. Since cultivating and maintaining motivation is particularly important for students with lower English proficiency levels (Brown, Campbell & Weatherford, 2008), using e-learning may have the potential to foster learner autonomy and motivation as well as boost students' English proficiency. In this paper, we outline a pilot study comparing the effects of a commercially available e-learning program called Longman English Interactive in two different types of teaching situations.

For the past nine years, under the Okayama University English education system, there has

been only one compulsory English class a week for the first four semesters for students in all faculties. To make up for the small number of compulsory classes, elective Advanced English classes were added to the curriculum for those students interested in taking additional classes. However, up until 2011, in order to take these classes, the students had to have a minimum Test of English for International Communication (TOEIC) score of 435, which was the approximate average score in 2007 when the TOEIC Institutional Program test was first introduced as a placement mechanism for all incoming first-year students. This 435 requirement proved to be problematic for students who wished to study more than the required one English class per week but did not meet the criteria. As well, some faculties required a certain TOEIC score to graduate, so how were these students meant to improve their scores if they had no chance to take any classes outside the required courses? We also wondered how we could foster better student autonomy for those whose motivation was somewhat lower than students with higher TOEIC scores.

2. E-learning and Autonomy

The growing popularity of e-learning programs is one reason why we were interested in piloting this study. E-learning programs provide learners with more convenience and flexibility than traditional classrooms. Learners can access the learning materials at any time and any place as long as they have access to the Internet (Kawamura, 2009). These characteristics of e-learning may help students learn at their own pace fostering a more positive attitude towards their own learning process. As well as promoting student attitudes toward self-study, e-learning materials can provide authentic situations which allow students to gain access to the target language and culture (Warshauer & Kern, 2000).

We, therefore, felt that using an e-learning program would help lower level students build learner autonomy while at the same time improve their English ability and motivation to continue learning. As Benson (2001) mentions, a change in the traditional classroom-based approach could give students a chance to make decisions regarding their own learning. According to Holec (1981), being an autonomous learner means to have 'the capacity to take charge of one's learning' (p. 3). We understood this to mean that students accept responsibility to determine their goals, select materials, make decisions regarding strategies and activities, monitor their progress, and assess their outcomes. Our belief was that students who work on e-learning in a self-study context would ultimately take charge of their own learning.

In addition to studying the effects of e-learning on learner autonomy, we wanted to investigate its effect on student motivation based on Dörnyei's (2009) L2 Motivational Self System, which is made up of three components: the *Ideal Self*, the *Ought-to Self*, and the *L2 Learning Experience*. The *Ideal L2 Self* is the self the learner would like to become. This can be a powerful motivator for those who know or respect someone in the target community. The learner would want to narrow the gap between his actual self and his ideal self by studying more. The *Ought-to Self* is the self the learner feels he ought to become. He might feel pressure to achieve a certain level of ability because of his parents' or teacher's expectations. Finally, the third component of the L2 Motivational Self System is the *L2 Learning Experience*. This

involves the whole environment that surrounds the learner including the teacher, the curriculum, the setting where learning takes place, and the learner's peers.

In our pilot study, the goal was to look at the effects of implementing a commercially available e-learning program in two different types of teaching situations. We wanted to explore how these two teaching approaches influence the learners' English proficiency and their motivation through the e-learning program. We looked at their level of improvement in English ability as well as their motivation based on Dörnyei's model of the *Ideal L2 Self* and *Ought-to Self* mentioned above. We are grateful to the university for allowing us to carry out this project through a Center of Excellence (COE) grant or 学内COE教育支援経費.

3. The Study

The study was conducted in the Fall Semester of 2010 in the Language Education Center at Okayama University. Since our main objective was to determine the effectiveness of e-learning, we decided to compare two different teaching situations and looked at two groups, an experimental and a control class. Students with a TOEIC score below 435 were eligible to take the experimental class. This particular class, which was an elective, had students work on the e-learning program outside the classroom with constant support from the teacher via email communication. The control class was a required Oral Communication class with students whose TOEIC scores ranged from 395-550. These students worked on a higher level e-learning program in class with guidance from the teacher. In both experimental and control classes, students took English proficiency tests and filled in beliefs questionnaires at the beginning and end of the course. The Global Test of English Communication (GTEC) was used in the control class due to unavoidable circumstances, and the TOEIC was used in the experimental class.

For the pre TOEIC/GTEC test and pre beliefs questionnaire, 37 students from the experimental group and 23 students from the control group participated. As for the post TOEIC/GTEC test and the post beliefs questionnaire, the numbers dropped slightly due to attrition, so the total number from the experimental group was 31 and from the control group was 21 students.

As mentioned earlier, the experimental class followed the distance learning model in that students were not required to attend all of the classes in order to complete the assignments. The only mandatory classes were at the beginning and end of the semester for orientation and wrap-up sessions. Students were given a schedule of when assignments were to be completed, and the teacher monitored their progress online. As part of the online program, students were required to submit written assignments from time to time, so the teacher could send comments and feedback to encourage students and keep them on the right track.

The control class followed the standard model, which was the traditional classroom setting. The students were required to attend class each week and worked on the e-learning program in class with the teacher's guidance. About 45 minutes of class was spent on individual online learning, while the rest of the class was spent explaining the program and doing pair work activities. The teacher asked the students to memorize the dialogues and then perform them in front of the class.

The data in the study was analyzed quantitatively. Descriptive statistics were used to analyze the TOEIC scores and beliefs questionnaires. Regarding the beliefs questionnaire (see Appendix 1), there were 14 items which reflected the constructs of *Motivation*, *the Ideal Self* and *the Ought-to Self*. The lower scales of each construct were summated and the mean scores were calculated. Because of the low number of sample students and different standardized English proficiency tests, it was not statistically sound to compare the scores between the groups. Therefore, the *t*-test was not employed for our analysis.

4. Results

4.1 Results of English proficiency tests

Table 1 shows the descriptive statistics of the results for the pre and post test scores. As indicated in Table 1 below, the TOEIC mean score improved from 389.7 to 460.3, showing a great rise of 70.6 points in the experimental group. On the other hand, the converted TOEIC mean score of the control group only rose 6.12 points to 510 from the pre test score of 503.88.

Table 1. The results of pre and post tests of TOEIC/GTEC scores

| Group | Pre Total Mean (SD) and Range | Post Total Mean (SD) and Range |
|--------------|--|---------------------------------------|
| Experimental | N= 37: 389.7 (77.9) (185~540) | N= 31: 460.3 (80.4) (340~630) |
| Control | N= 23: 503.88 (46.85) (424.32~601.12) | N= 21: 510 (56.79) (386.75~603.33) |

Note: GTEC scores were converted at 2.21 to TOEIC scores

4.2 Results of beliefs questionnaire

The two tables below show the descriptive statistics of the beliefs questionnaire results. As shown in Tables 2 and 3, the mean scores of all three constructs showed slightly higher values in the experimental class than the control class both in the pre and post test. Among the three constructs in the experimental class, the *Ideal Self* indicated the highest value of 3.77 and 3.83 in the pre and post test respectively with a slight rise of .06. As for the control class, the *Ought-to Self* showed the largest value of 3.52 and 3.61 in the pre and post tests respectively with a slight rise of .09.

Table 2. The results of pre beliefs questionnaires

| Group | <i>Motivation</i> Mean (SD) | <i>Ideal Self</i> Mean (SD) | <i>Ought- to Self</i> Mean (SD) |
|----------------------|-----------------------------|-----------------------------|---------------------------------|
| Experimental N=37 | 3.69 (.94) | 3.77 (.78) | 3.75 (.77) |
| Control N=23 | 3.31 (.56) | 3.40 (.81) | 3.52 (.81) |

Note: Max. = 6; Min. = 1

Table 3: The results of post beliefs questionnaires

| Group | <i>Motivation</i> Mean (SD) | <i>Ideal Self</i> Mean (SD) | <i>Ought- to Self</i> Mean (SD) |
|----------------------|--------------------------------|--------------------------------|------------------------------------|
| Experimental N=31 | 3.73 (.91) | 3.83 (.73) | 3.79 (.83) |
| Control N=21 | 3.35 (.82) | 3.41 (.75) | 3.61 (.70) |

Note: Max. = 6; Min. = 1

5. Discussion

At the start of this project, our main objective was to determine whether e-learning would be an effective teaching tool for students whose English ability was low. Looking at the results of the pre and post tests of the TOEIC and GTEC, it is clear that the experimental group showed a much greater increase after using the e-learning program. Although it is difficult to compare two completely different standardized tests, Benesse Corporation, the creators of the GTEC, supply a comparison chart showing the GTEC scores converted to corresponding TOEIC scores. This chart and Table 1 show that the control group started out with higher converted TOEIC scores than the experimental group, yet their scores did not increase as much as the experimental group. The reasons for this may include the fact that the control group (Oral Communication class) was a required class so the students were not necessarily motivated to study English. The experimental group (Advanced English class) was an elective class, and students wanted to be there to increase their TOEIC scores. In the control group, students had to work within the constraints of the classroom, but in the experimental group, students had greater autonomy and could make choices on when and where to study.

We also wanted to look at the relationship between e-learning and the three constructs of *Motivation, the Ideal Self, and the Ought-to Self*. Looking at the data in Tables 2 and 3 above show us that there are only negligible gains, however, it is safe to say that the students in the distance learning class (the experimental group) benefit more than the students in the traditionally taught class (the control group). Overall, the data show that perhaps using e-learning is an effective way of giving the students an opportunity to develop their autonomy in learning. Especially in the distance learning class, students need to assess what they have to do themselves and make their own study schedule in order to complete the tasks for each lesson module. Perhaps as they accomplish each unit successfully with encouragement from the teacher, they could also develop their image of the *L2 Self*, both *Ideal* and *Ought-to*, as shown in the slight increases in the means in Tables 2 and 3.

As Nielson (2011) argues, one of the key issues for bringing self-study to success is the teacher's guidance and support. Although this pilot study has not provided clear evidence that e-learning does indeed improve English proficiency and foster learner autonomy, we believe that the distance learning model (shown by the experimental group) has great potential for helping lower level English proficiency students who are taking general English classes in Japan.

6. Conclusion

The analyses of the pre and post tests and beliefs questionnaires did not show much improvement, but we feel we could come to some practical conclusions. First of all, the data show that test scores do increase after working on the e-learning program. Students, such as those in the experimental group who specifically selected the course, showed increased motivation and subsequently higher scores. We feel this shows some evidence that this particular e-learning program was helpful for students who are extrinsically motivated to improve their TOEIC scores. Secondly, the benefits of using e-learning as a teaching tool for foreign languages to increase motivation and students' perceptions of their L2 self, however slightly, cannot be ignored. As mentioned earlier, students have the flexibility to access the materials online whenever they want or have time and can monitor their progress as they study. Also, the materials provide authentic situations which expose students to the target language and culture. This is an important aspect in helping students imagine themselves as speakers of the target language.

After this pilot study was carried out, we were fortunate enough to receive an additional COE grant and were able to administer the same e-learning program, but this time, in three different teaching situations. We are currently conducting analyses of similar quantitative data along with interview transcripts of selected students who have taken the three courses. We hope to find clearer evidence that e-learning can be a valuable tool for language learners in terms of language ability and improving motivation.

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Appendix 1

アンケートのお願い

このアンケートは、みなさんの英語学習に対する考えをお聞きするものです。みなさんの意見は今後の英語教育研究の貴重な資料となり、このアンケートのデータは統計的に処理され個人の成績に反映されるものではありません。また、このデータが研究目的以外のことに使用されることはありません。質問には深く考え過ぎず、全問5分程度でお答え下さい。ご協力よろしく願いいたします。

I. あなた自身について教えてください。

下記の中で、あなたが英語を勉強する一番の目的は何ですか？

あてはまるもの1つだけに○をつけて下さい。

- (1) 教養を身につけるため (2) 将来の仕事に活かすため
 (3) TOEICなど資格試験のため (4) 英語圏の友達をつくるため
 (5) 卒業要件を満たすため

II. 1から10の意見を読み、その内容について自分の考えに最もよく当てはまる選択肢を下記の表から1つ選んで回答欄にその番号を記入してください。

1 (全くそう思わない) 2 (そう思わない) 3 (どちらかと言えばそう思わない)
 4 (どちらかと言えばそう思う) 5 (そう思う) 6 (強くそう思う)

| 意見 | 回答欄 |
|-----------------------------------|-----|
| 1. 英語学習は本当に楽しい | |
| 2. 自分が外国人と英語で話している状況を想像することができる | |
| 3. もし英語が出来なかったら、周りをがっかりさせてしまう | |
| 4. 英語をこれからもっと頑張って勉強するつもりだ | |
| 5. 英語を話す自分が想像できる | |
| 6. 英語が出来れば、良い仕事に就くことができる | |
| 7. 英語の勉強に多くの時間をかけたい | |
| 8. 自分が将来やりたいことには英語が必要だ | |
| 9. 親は自分が英語が出来るよう努力すべきだと思っている | |
| 10. 一生懸命英語を勉強している | |
| 11. 英語でスラスラEmailを書いている自分が想像できる | |
| 12. 英語は自分にとって大学の単位修得のためだ | |
| 13. 英語学習にベストを尽くしていると本心からそう思う | |
| 14. もし夢がかなうのなら、将来英語を上手に使えるようになりたい | |

ご協力ありがとうございました。

