Textbooks or E-learning? Learners' Preferences and Motivations in a Japanese EFL Classroom

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This study investigates Japanese EFL learners' attitudes and preferences towards textbooks and web-based materials in a blended learning context. Sixty-four undergraduate students of a two-semester English course were asked to complete a questionnaire, which was designed to measure their satisfaction with each type of learning material and their motivation and autonomy in learning English, especially in grammar practice. The results revealed that a greater number of students preferred web-based materials to paper-based ones. Additionally, the results of SEM analysis indicate that learner satisfaction with e-learning materials has a positive effect on their attitudes towards self-study. However, students who preferred textbooks appreciated their advantages, such as the ability to take handwritten notes and the ease of understanding grammar points with face-to-face feedback. Therefore, the findings suggest that a well-balanced blend of materials may meet a wide variety of learners' needs and promote positive attitudes towards autonomous language learning.

本研究は、ブレンディッドラーニング（ブレンド型学習）環境での教科書とeラーニング教材使用に関する日本人英語学習者の考え方と好みを調査したものである。通年の英語科目を履修している大学生64名を対象に、それぞれの教材に対する満足度、英語学習、特に文法演習への動機づけ、及び自律性を測るアンケートを実施した。その結果、eラーニング教材を好む学生の数が教科書を好む学生の数を上回った。また、構造方程式モデリング（SEM）の分析結果から、eラーニング教材に対する満足度は学習者の自主学習にプラスの影響を及ぼすことが示唆された。しかし教科書を好む学生は、手書きで書き込みができること、教師からの対面でのフィードバックで文法項目が理解しやすいこと、といった教科書使用の利点を高く評価した。従って本研究の結果から、教材をバランスよく使用することで、学習者の多様なニーズに応えることができ、学習者の自律的な言語学習が促進される可能性があることが示唆された。

E-learning has been integrated into language curricula and classroom activities in colleges and universities. One of the notable features is the use of e-learning in studying for English proficiency tests such as the TOEIC® Test and the Eiken Test. Many colleges and universities provide opportunities for students to access diverse web-based learning materials both in and outside classroom environments. To improve their scores, students can work on various activities and tasks using digital devices such as personal computers, tablets, and smartphones. Additionally, they can have online feedback for each answer.

Computer-mediated learning can allow learners to study at their own pace, fostering autonomy (Blin, 2004; Mishan, 2004). Therefore, many teachers give online assignments consisting of English grammar and vocabulary practice in TOEIC® or Eiken classes. They may expect their students to develop good study habits as well as English skills through the web-based assignments. Previous literature indicates that the flexibility of e-learning may be an important factor of learner satisfaction (Sun, Tsai, Finger, Chen, & Yeh, 2008) and be essential to learners' autonomous learning (Liaw, Huang, & Chen, 2007).

However, there remains a need for traditional face-to-face teaching with textbooks. Stracke's (2007) qualitative study suggested that learners may drop out of computer-mediated second language courses due to a lack of teacher support and an absence of paper-based materials such as textbooks. With regard to the lack of printed materials, the interview data showed that some learners seemed to be frustrated partly because they obtained information from a computer screen less easily than from a textbook or dictionary, and partly because they could not write by hand on the screen like on paper. In other words, learners may be accustomed to studying with paper-based materials, and therefore have difficulty with using online materials (Avgeriou, Papasalouros, Retalis, & Skordalakis, 2003).

Jarvis and Szymczyk (2010) administered questionnaires and interviews to non-native English speakers studying at a British university and found that students preferred paper-based materials to web-based ones for grammar practice in self-study settings. Additionally, the interviews showed that some students may regard the websites as resources with various contents but not presenting grammar items in a systematic way. Thus, despite the many computer-based language activities available, they may appreciate comprehensible and clear explanations of grammar rules in textbooks. However, because the contents of

the web-based materials were different from those of the paper-based materials, the students' preference may be influenced by those differences.

Purpose of the Study and Research Questions

Positioned against this contextual background, the present study investigates English language learners' attitudes and preferences towards two types of materials: textbooks and e-learning materials. Using a questionnaire, the study aimed to answer the following research questions (RQs):

RQ1: Which materials do learners prefer to learn English grammar with in the classroom; textbooks or e-learning materials?

RQ2: How does learner satisfaction with materials have an impact on their motivation to learn English?

RQ1 is intended to re-examine the findings of Jarvis and Szymczyk (2010) in a computer-assisted EFL classroom setting. In consideration of learning styles in the classroom context, the present study also investigates learners' preferences towards face-to-face teaching. RQ2 explores the relationships between learners' satisfaction with materials and their motivation or autonomy. While many previous studies (Bañados, 2006; Miyazoe & Anderson, 2010) have indicated that a combination of face-to-face teaching and e-learning (i.e., blended learning) is likely to benefit language learning, little research has been conducted to investigate how learner satisfaction with materials may affect attitudes towards learning both inside and outside the classroom.

Method

Participants

Participants were 64 undergraduates from a private university in Tokyo who took a general English class in the spring and fall semesters (from April 2012 to January 2013). They were divided into two classes. Both groups had the same course contents and were taught by the same teacher. At the beginning of the course, the teacher demonstrated how to use the e-learning program. An initial placement test ensured that all learners were at a lower-intermediate level of English proficiency, which is equivalent to a TOEIC® Bridge score of 68 to 140.

Materials

The main textbook used in the course was *Get Ready for the TOEIC® Test* (Matsuoka, 2005), designed especially for Japanese college students. Each chapter includes TOEIC-style exercises, language tasks, and explanations of grammar concepts. In addition, ALC Net Academy 2 English Grammar and Introductory Courses were used for the e-learning materials. At the beginning of the ALC Net Academy program, the computer automatically selects grammar, vocabulary, reading, or listening questions based on learners' performance and lets them know which course level is appropriate. Each learner can work on a wide variety of exercises at the appropriate level, and the computer provides immediate feedback on performance as well as correct answers.

Procedure

In some colleges and universities, the curriculum stipulates that teachers should incorporate web-based self-study into their classes (Seki, 2010). The course curriculum in this study was designed to incorporate in-class computer self-study. Teachers were strongly encouraged to use e-learning materials in the course. Therefore, each class period (90 minutes, once a week) consisted of 30–35 minutes of self-study on computers with the teacher's support, 30–35 minutes of face-to-face teaching with the textbook, and the rest of the period working on communication activities. The teacher focused on improving students' vocabulary and grammar skills using the textbook and e-learning materials. He had the students practice one or two grammatical items in each session, using the textbook or e-learning materials. To minimize the influence of the different types of materials, the same grammatical items were used in part of the lesson.

After the final class of the fall semester, a questionnaire was administered to the 64 participants. Two of them were incomplete and were thus eliminated from the data analysis. The 18 questionnaire items were developed based on Jarvis and Szymczyk (2010) and Bañados (2006), and were originally written and administered in Japanese. Sixteen items of them were designed to measure participants' satisfaction on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Participants indicated to what degree they were satisfied with the textbook, e-learning materials, and course content, and whether the level of the materials was appropriate. The items were subjected to statistical analysis using the structural equation model (SEM). SEM has an advantage over other statistical methods such as factor analysis in that the relationship between several variables can be displayed as directional paths (Csizér & Dörnyei, 2005). Additionally, the participants were also asked to identify which of

the two material types they preferred to use to learn grammar with, and to provide reasons for their choice (items 17 and 18).

Results and Discussion

Learner Satisfaction with Materials and Course Content

Participants first rated their computer skills and attitudes towards grammar practice, then completed questionnaire items about their satisfaction with materials and course content. The descriptive statistics for the first four items are shown in Table 1.

Table 1. *Descriptive Statistics for Questionnaire Items about Learners' Computer Skills and Attitudes Towards Grammar Practice*

Item No.	Questionnaire Items	*M*	*SD*	*Min*	*Max*
1.	I am good at using a computer.	3.03	1.02	1	5
2.	I think that the interface of e-learning program is easy to use and understand.	3.97	.79	2	5
3.	I think that grammar is important in learning English.	4.19	.92	1	5
4.	I work on practicing English grammar outside classroom.	2.15	1.07	1	5

Items 1 and 2 indicate that, although some students may not have confidence in using computers, they can work properly with the e-learning program because of the clear and simple user interface. As for item 3, as Jarvis and Szymczyk (2010) reported, the results also revealed that most students recognised the importance of grammar in learning English. However, the results of item 4 indicate that self-study habits outside the classroom may be a challenge for many students.

Table 2 summarises the descriptive statistics for questionnaire items about participants' satisfaction with materials and course content. The mean values showed overall satisfaction with the textbook, e-learning materials, the teacher's instruction, and course content. The Mann-Whitney test was applied to compare students' satisfaction with the textbook (items 5, 7, and 9) and with the e-learning materials (items 6, 8, and 10), and revealed no significant differences between the two types of materials in terms of students' satisfaction ($U = 17066.50$, $p > .05$). Moreover, the Mann-Whitney tests showed no significant differences between items 5 and 6, items 7 and 8, and items 9 and 10. Thus, the results indicate that, although it is uncertain which type is likely to be more useful for learners, both the textbook and e-learning materials may contribute to learner satisfaction in language learning.

Table 2. *Descriptive Statistics for Questionnaire Items about Learner Satisfaction with Materials and Course Content*

Item No.	Questionnaire Items	*M*	*SD*	*Min*	*Max*
5.	I think that the textbook is useful for grammar practice.	3.58	1.03	1	5
6.	I think that the e-learning materials are useful for grammar practice.	3.71	.98	1	5
7.	I think that the textbook is useful for learning English.	3.68	1.00	1	5
8.	I think that the e-learning materials are useful for learning English.	3.69	.93	1	5
9.	I think that the level of the textbook is appropriate.	3.82	.95	2	5
10.	I think that the level of the e-learning materials is appropriate.	3.79	.85	2	5
13.	I think that the teacher's instruction is helpful in class.	4.10	.95	1	5
16.	I am satisfied with overall course activities.	3.95	.80	1	5

Students' preference for materials was clearer when they were asked which type was more useful for grammar practice:

Q17. Which do you prefer to use to learn English grammar, the textbook or e-learning materials?

In item 17, while 22 students preferred the textbook, 40 students were in favour of using e-learning materials—a direct contrast to Jarvis and Szymczyk (2010). Additionally, in item 18, the students who chose e-learning materials wrote the following comments (translation mine):

1. The e-learning courses are divided into several different levels, so I can intensively learn items necessary for me to understand.
2. I can work on the same portion of the materials again and again.

As comment 1 indicates, some students appreciate the interface design to allow users to select learning levels. With regard to comment 2, repeating drills on the screen may be an important factor for students to increase their satisfaction. On the other hand, students who preferred the textbook offered a different set of reasons, as in the following excerpts:

3. Taking notes on the pages enables me to review the important things I learned.
4. I prefer using the textbook partly because it provides many example sentences, and partly because the teacher explains grammar points in detail.

Of the 22 students who preferred the textbook, eight pointed out the advantage of being able to take handwritten notes. In addition, some students appreciated face-to-face teaching with the textbook. Thus, comments 3 and 4 are consistent with those reported in Stracke (2007).

These comments indicate that learner satisfaction with teaching materials is related to how well those materials meet the diverse needs of individual students. Additionally, as comment 4 and the results of questionnaire item 13 show, face-to-face feedback as well as online feedback is likely to have a positive effect on learning in the classroom context.

Learners' Motivation and Autonomy

The descriptive statistics for questionnaire items about participants' motivation and autonomy are shown below in Table 3.

The results of items 11, 12, and 14 revealed that many students may not be interested in self-study outside the classroom or in taking an English proficiency test. The results were consistent with those of item 4. One reason might be that some students lack motivation due to their lower English proficiency. Another might be that some students rely on learning in class, and are not willing to learn outside the classroom. However, while 14 students selected the category of strongly disagree or disagree, 27 students responded strongly agree or agree in item 15. In other words, the positive responses suggest that blended learning may change students' approach to learning.

Table 3. *Descriptive Statistics for Questionnaire Items about Learners' Motivation and Autonomy*

Item No.	Questionnaire Items	*M*	*SD*	*Min*	*Max*
11.	To improve my English skills, I would like to use textbooks for self-study outside the classroom.	2.97	.96	1	5
12.	To improve my English skills, I would like to use e-learning materials for self-study outside the classroom.	3.15	1.14	1	5
14.	I will take a TOEIC® test after this English course.	3.05	1.14	1	5
15.	I think that the class activities have changed my approach to learning English.	3.16	.99	1	5

Based on the results of the questionnaire, SPSS AMOS ver. 17 was used to carry out SEM analysis. As shown in Figure 1, results revealed a relationship between learner satisfaction with e-learning materials and learner's motivation and autonomy. In this model, learner satisfaction with e-learning materials and learner's motivation and autonomy were posited as latent variables. Observed variables, or indicators, were as follows: useful for grammar practice (item 6), useful for learning English (item 8), appropriate level (item 10), learning English outside the classroom (item 12), taking a TOEIC® test (item 14), and change in learning styles (item 15).

All paths were significant ($p < .01$). The goodness of fit index (GFI) was .936; the adjusted goodness of fit index (AGFI) was .851; the comparative fit index (CFI) was .973; and the root mean square error of

approximation (RMSEA) was .082. The indices except for RMSEA indicate that the model fits the data reasonably. As for GFI, AGFI, and CFI, values closer to 1.0 indicate a good fit between the model and the data, although "there are no strict norms" for these indices (Raykov & Marcoulides, 2006, p. 43). With regard to RMSEA, values of less than 0.05 indicate a good fit, values of 0.05 to 0.08 indicate a fair fit, values of 0.08 to 0.10 indicate a mediocre fit, and values above 0.10 show a poor fit (MacCallum, Browne, & Sugawara, 1996). Additionally, all path coefficients show that the relationships between variables are sufficiently established. The results indicate that learners' satisfaction with e-learning materials is likely to have a positive effect on their motivation and autonomy in learning English.

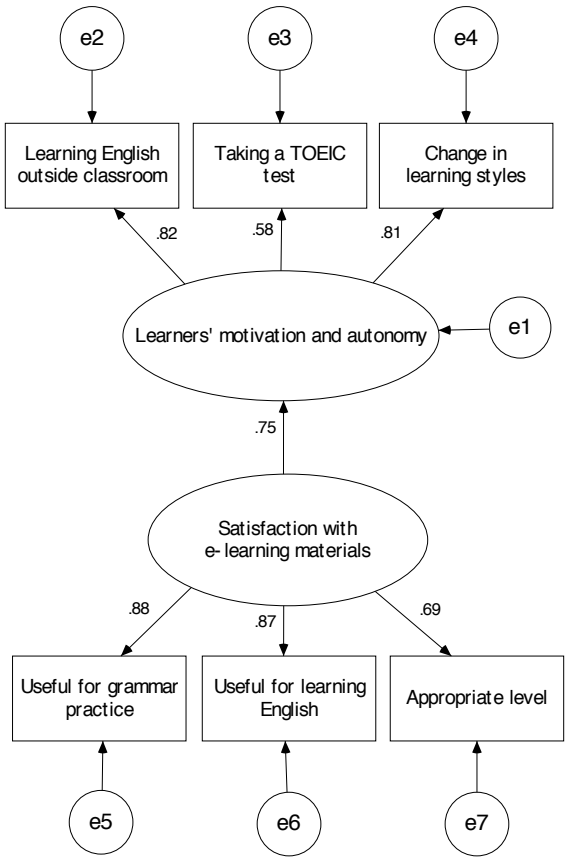

Figure 1. Relationships between learners' satisfaction with e-learning materials and their motivation or autonomy.

The same SEM procedure was applied to the relationship between learners' satisfaction with the textbook and motivation or autonomy, but the model did not fit the data (GFI = .897; AGFI = .759; CFI = .928; RMSEA = .142). Some other factors such as kinds of materials and teacher's instructions may have an effect on the latent variables in the model.

Conclusion

This study has two major findings. First, results obtained from the analysis of the questionnaire data suggest that a combination of textbooks and e-learning materials may contribute to learner satisfaction in grammar practice. Regarding the answer to RQ1, contrary to Jarvis and Szymczyk (2010), the present study showed that many learners preferred web-based materials to paper-based ones (see the result of questionnaire item 17). In other words, many Japanese college students may have a bent for computer-based learning because they have been long accustomed to using computers and playing video games. However, some students were in favour of textbooks because they accommodate handwritten notes. Additionally, face-to-face teaching with textbooks is likely to be helpful for students. In classroom settings, blended learning may be a good solution for developing learners' basic skills in English.

Second, the present study lends empirical support to the potential of web-based materials in a blended learning context. In regard to the answer to RQ2, the results of SEM analysis indicate that learner satisfaction with e-learning materials may foster motivation and promote positive attitudes towards self-study. Teachers who make use of computer technology—in or outside classroom—can help cultivate digital-age learners' autonomy.

A limited number of materials and learners were involved in the present study. As in Jarvis and Szymczyk (2010), learner preference may be influenced by the difference of material contents. Learners at higher proficiency levels may exhibit different preferences, and a wider variety of materials may also yield different results. Additionally, the present study did not examine how well web technology can be blended with traditional teaching methods. For example, touchscreen devices, like tablets and smartphones, enable learners to take handwritten notes in a regular classroom, but the study focused only on blended learning in a computer-assisted classroom. Further research will need to investigate the effects of blended learning in a variety of teaching situations and how e-learning contents can be systematically combined with textbook ones.

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