

Research and Development of the Online Blended Course in Practical English Phonetics

การวิจัยและพัฒนาหลักสูตรศาสตร์ภาษาอังกฤษเพื่อการใช้รูปแบบออนไลน์ผสม

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Abstract

This study aimed to develop a blended online course in practical English phonetics. The subjects were 67 students from purposive sampling, including two groups of students. The first group of students was majoring in English education and the second group of students was majoring in business english. Both groups were second-year students of Phetchaburi Rajabhat University taking the practical English phonetics course in the second semester of the 2018 academic year. The research tools were the following:

- 1) Online blended course of practical English phonetics
- 2) Achievement tests including pretest and posttest
- 3) Evaluation form of the effectiveness of the blended online course on LMS by experts in IT education
- 4) Students satisfaction survey in the blended online course in practical english phonetics.

The statistical analysis consisted of the course efficiency, mean, standard deviation and t-test dependent. The results showed that the blended online course had efficiency at 82.84/94.73, which was higher than the criteria. The students' learning achievement indicated a statistically significant level of .05. In addition, the students' satisfaction survey suggested that the students were satisfied with the course at a high level.

Keywords: Course development, Blended online course learning, Practical English phonetics

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อพัฒนาบทเรียนหลักสูตรศึกษาศาสตรบัณฑิตภาษาอังกฤษเพื่อการใช้รูปแบบออนไลน์ผสม กลุ่มตัวอย่างที่ใช้ในการวิจัยได้แก่นักศึกษหลักสูตรครุศาสตรบัณฑิต สาขาวิชาภาษาอังกฤษ และนักศึกษาหลักสูตรศิลปศาสตรบัณฑิต สาขาวิชาภาษาอังกฤษธุรกิจ ชั้นปีที่ 2 มหาวิทยาลัยราชภัฏเพชรบุรีที่ลงทะเบียนเรียนรายวิชาศึกษาศาสตร์ภาษาอังกฤษเพื่อการใช้ประจำภาคเรียนที่ 2 ปีการศึกษา 2561 จำนวน 67 คน โดยใช้วิธีสุ่มแบบเฉพาะเจาะจง (Purposive Sampling) เครื่องมือที่ใช้ในการวิจัยได้แก่ 1) บทเรียนวิชาศึกษาศาสตร์ภาษาอังกฤษเพื่อการใช้รูปแบบออนไลน์ผสม 2) แบบทดสอบวัดผลสัมฤทธิ์ทางการเรียน เป็นแบบทดสอบก่อนเรียนและหลังเรียน 3) แบบประเมินประสิทธิภาพระบบการเรียนรู้แบบผสมออนไลน์ (LMS) จากผู้เชี่ยวชาญด้านเทคโนโลยีการศึกษา 4) แบบประเมินความพึงพอใจของบทเรียนวิชาศึกษาศาสตร์ภาษาอังกฤษเพื่อการใช้รูปแบบผสมออนไลน์ สถิติที่ใช้ในการวิเคราะห์ข้อมูลได้แก่ การคำนวณค่าประสิทธิภาพของบทเรียน ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการทดสอบค่าที (t-test) ผลการวิจัยพบว่า ด้านประสิทธิภาพของบทเรียนออนไลน์ มีประสิทธิภาพ 82.84/94.73 สูงกว่าเกณฑ์ที่กำหนดไว้ และด้านผลสัมฤทธิ์ทางการเรียนด้วยบทเรียนออนไลน์ ค่าเฉลี่ยของคะแนนทดสอบหลังเรียนมีค่ามากกว่าคะแนนทดสอบก่อนเรียนอย่างมีนัยสำคัญทางสถิติที่ระดับ.05 ค่าความพึงพอใจต่อการเรียนอยู่ในระดับมาก

คำสำคัญ: พัฒนาบทเรียน, การเรียนรูปแบบผสมออนไลน์, ศึกษาศาสตร์ภาษาอังกฤษเพื่อการใช้

Introduction

Blended learning (BL), which is the integration of the use of E-Learning and face to face interaction in classroom learning, is not a new concept. It was not until the beginning of the 21st century that the terminology was widely recognized (Johnson and Marsh, 2013). When BL is effectively implemented, it is believed to have significant potential to promote meaningful learning.

However, simply integrating online technology with traditional classroom learning may not suffice to optimize the possibilities of BL (Marsh, 2012). Johnson and Marsh (2013) suggest that the appropriate combination of learning modes for individual learners, contexts and objectives is the most important aspect

of BL design. Therefore, there is no perfect formula for developing a BL course.

However, the great potential of the advance of information technology (IT) does not only promote BL in foreign language education such as EFL (English as a foreign language), but it also brings challenges for the learning. The positive aspects include the possibilities to expand foreign language learning beyond the traditional classroom and into the online mode. Web 2.0 tools (wikis, blogs, chat forums, voice and video functions, etc.) encourage maximum practice and extended instruction.

The challenges for BL in foreign language education are that the learners need to be proactive and autonomous in order to

be successful in BL of language class (Astin, 1999; Kuh, 2009). Research in computer-assisted language learning (CALL) shows that there is no direct relation between IT literacy and the technological optimization for learning and learning achievement (Kirkwood, 2004; Kirkwood and Price, 2005).

The fact that BL has the flexibility in course delivery increases its popularity and practical function for both teachers and learners. The online application part of BL does promote not only 21st-century skill for learners but also support individual differences in learning. Enriching the traditional classroom, a learning management system (LMS), the platform for online content, effectively support blended course implementation.

In the case of foreign language education, recent research shows that BL can promote positive attitudes toward the blended approach among teachers and learners and they perceive that BL is effective for foreign language learning (Lee & Lee, 2013; Wu & Liu, 2013).

Previous studies concerning BL in English as a Foreign language (EFL) show that there are positive learning outcomes in EFL learners in several aspects, including reading comprehension, oral proficiency, appropriate pronunciation and lexical accuracy (Behjat, Yamini, & Bagheri, 2012). However, the BL approach in English phonetics in the context of higher education in Thailand is still little known and need more exploration.

This research examines the BL approach in practical English phonetics class at one local university in Thailand. The class is a core subject for students majoring in business English and English Education. High proficiency in English and appropriate pronunciation are required of the prospective graduates as most of them are becoming English teachers and choosing a career that needs communicative skills in English. However, a large number of students per classroom and limited time for pronunciation practice result in ineffective teaching and learning.

To overcome the challenges of providing Practical English phonetics in the traditional classroom, the researchers apply the BL approach for the class. The rationale for the adoption of BL approach in Practical English phonetics in the university include 1) Plentiful opportunities for practicing appropriate pronunciation on line, 2) Reducing the students' anxieties of pronunciation errors when speaking in front of the class and 3) Supporting the teacher in covering all the content required in the curriculum.

Objectives of the study

The objectives of the study include the following.

1. To develop a practical english phonetics Course using BL approach
2. To investigate the effectiveness of the practical English phonetics Course using BL approach

3. To examine the students' satisfaction toward the Practical English phonetics Course using BL approach

Methodology

The design of this study is descriptive research. The study sample comprised second-year students majoring in English education and business English of phetchaburi Rajabhat University taking the practical English phonetics in the second semester of the 2018 academic year.

The participants, 67 students, were selected purposefully from the two groups of students taking the practical English phonetics. The research tools were the following.

1. Evaluation form of the effectiveness of the blended online course on LMS The BL lessons consisted of face-to-face interaction in the classroom and E-Learning lessons through LMS. Three experts in Information Technology Education assessed the effectiveness of LMS components. The statistical analysis based on means and standard deviations.

2. Achievement tests including pretest and post-test

The tests of the BL contents in practical English phonetics were measured for IOC by three university professors specialized in English and English education. Then the test items that meet the criteria were adopted for pretest and posttest. The BL in practical English phonetics' achievement was compared between the pretest and the posttest by t-test

dependent analysis.

3. Students satisfaction survey in the blended online course in practical English phonetics.

The survey consisted of 12 question items regarding the students' satisfaction for the BL course in practical English phonetics. The satisfaction level was measured by 5 points Likert scale including 5=very satisfied, 4=satisfied, 3=neutral, 2=unsatisfied and 1=very unsatisfied.

The study was conducted according to the following procedures.

1. The researchers informed the participants about the objectives of the study and detailed instructions in the application of BL format for practical English phonetics class. There were three lessons requiring 6 class periods per each lesson provided in the classroom and online through LMS. There were pretest and posttest for each lesson.

2. The participants were invited to register to the university email in order to access to LMS on the university server system. The researchers provided the training on important aspects, including how to learn the lessons, how to use the materials on LMS, how to do the exercises, tests and assignments submission.

3. The teachers regularly examined the participants' activities online and their learning results. After the completion of the teaching and learning process, the researchers administered the achievement test and the

participants' satisfaction surveys and conducted the statistical analysis.

To achieve the research objectives, the following statistical analysis was employed.

1. The efficiency criteria of the BL course in practical English phonetics is 80/80 using the formula E_1/E_2 .

2. The students' learning achievement through BL format was compared between pretest and posttest using t-test dependent analysis

3. The effectiveness of the BL course was assessed by experts' survey using statistical analysis for means and standard deviations.

4. Percentages, means and standard deviations were employed for analyzing the participants' satisfaction survey data.

Result

According to the statistical analysis, the research results are the following.

1. The effectiveness of the practical English phonetics Course using BL approach

To calculate the E1 of the BL lessons delivered through LMS based on efficiency criteria, 80, we found that the E1 was 82.84, which was higher than the efficiency criteria, as shown in Table 1.

In addition, the E2 of the BL lessons provided on LMS based on efficiency criteria, 80, was 94.73 (Table 2). Therefore, the E_1/E_2 of BL lesson in practical English phonetics is higher than efficiency criteria, 80/80.

2. The students' learning achievement through BL format

To assess the students' learning achievement, the researchers calculated the means of the pretest and the posttest, standard deviations of both tests and statistical significance.

As shown in Table 3, the statistical significance (.05) on the achievement posttest was attributed to the BL format, in which the students perform higher in their posttest ($\bar{X}$ =28.89, SD.=1.55) than the pretest ($\bar{X}$ =23.88, SD.=2.80).

3. The efficiency of BL course in practical English phonetics on LMS assessed by three experts in IT education

The researcher provided the three experts the link to access to the LMS and asked them to evaluate the system of BL course delivery on LMS by answering the survey. The survey questions include ten items. Table 4 shows that the three experts strongly agreed that the BL course in practical English phonetics using LMS for delivering the content was effective. Their rating of the agreement for ten aspects was very high ($\bar{X}$ =4.6, S.D.=0.35).

4. Students' satisfaction toward the blended online course in practical English

Phonetics. The students' overall satisfaction toward 12 aspects of the BL format was at a high level, as shown in table 5. The findings show that the participants taking the BL course in practical English phonetics

delivered through LMS were satisfied with the course at a high level ($\bar{X}=4.23$, S.D.=0.64)

According to the data analysis, as shown in table 1-5, the research results can be summarized as the following.

1. The development of the BL course in practical English phonetics and its efficiency achieved the efficiency criteria and promoted

the learning.

2. The participants had learning achievement by studying the BL course.

3. The experts in IT Education perceived that the BL course via LMS was effective.

4. The participants were satisfied with the BL course in practical English Phonetic

Table 1: The efficiency of BL lessons delivered through LMS (E1)

Item	n	Total scores	Accumulated scores	Mean	E1
Exercises/ Assignments	67	2,010	1,665	24.85	82.84

Table 2: The efficiency of BL lessons delivered through LMS (E2)

Item	n	Total scores	Accumulated scores	Mean	E2
Exercises/ Assignments	67	2,010	1,904	28.42	94.73

Table 3: The students' learning achievement through BL format

Scores	n	$\bar{X}$	S.D.	t
Pretest 30	67	23.88	2.80	16.26
Posttest 30	67	28.89	1.55	

Table 4: The experts' survey on the effectiveness of the BL course in Practical English Phonetics (LMS)

Assessment Items	$\bar{X}$	S.D.	Rating scales
1 Log in to the LMS for the BL course is convenient and easy.	5	0.00	Strongly agree
2 Searching for the lesson topics is appropriate.	4.66	0.57	Strongly agree
3 Lesson menus are useful.	4.66	0.57	Strongly agree

Table 4: The experts' survey on the effectiveness of the BL course in Practical English Phonetics (LMS) (cont.)

	Assessment Items	$\bar{x}$	S.D.	Rating scales
4	Accessing to the attached file content via LMS is supportive.	4.66	0.57	Strongly agree
5	Class participation via LMS is effective.	4.66	0.57	Strongly agree
6	Audio files submission via LMS is effective.	4.66	0.57	Strongly agree
7	Document files submission via LMS is effective.	4.66	0.57	Strongly agree
8	Test taking via LMS is effective.	5	0.00	Strongly agree
9	Communication between the students and the teacher is effective.	4	0.00	Agree
10	Communication between the students is effective.	4	0.00	Agree
	Total average	4.6	0.35	Strongly agree

Table 5: Students' satisfaction toward the BL course in Practical English phonetics

	Assessment Items	$\bar{x}$	S.D.	Rating Scales
1	The module design is easy for learning.	4.25	0.59	Satisfied
2	The lessons fully cover the content.	4.25	0.64	Satisfied
3	The content level is appropriate for the students.	4.25	0.64	Satisfied
4	The content quantity is suitable for the students.	4.10	0.60	Satisfied
5	The tests are consistent with the content and relevant.	4.23	0.64	Satisfied
6	The test of each lesson is appropriate.	4.25	0.56	Satisfied
7	The access to the lesson on LMS is easy and convenient.	4.05	0.74	Satisfied
8	Knowledge from the BL course is useful for daily life.	4.46	0.66	Satisfied
9	The description voices of the lessons are clear.	4.13	0.78	Satisfied
10	The assignment of each lesson is appropriate.	4.34	0.62	Satisfied
11	The speed of score report is appropriate.	4.22	0.66	Satisfied
12	Overall satisfaction for the learning of BL course	4.25	0.56	Satisfied
	Total average	4.23	0.64	Satisfied

Discussion

The results demonstrated that the BL course in practical English phonetics integrating online learning via LMS and face-to-face interaction in the classroom promoted the students' learning achievement. This positive outcome could be contributed to the advantages of the advancement of information technology, which supports foreign language learning.

The computerized materials provided through LMS increased more opportunities for listening to the course content and appropriate pronunciation, which led to multiple practices at an individual learning pace. This learning process helped reducing Thai students' fear of error as they could practice how to produce correct speech as much as they need until they felt confident, which is very important for EFL learners.

The role of oral output in second language acquisition (SLA) has been well established in a few decades (Swain, 1985, 2005). Learners' affective aspects such as emotion and anxiety could affect oral production. If learners feel embarrassed or confused when interacting in the classroom, they might not perform well.

The result of this study is consistent with Hojnacki (2016), who found that students who take BL course in German spent more time on language production and produced significantly more complex language when interacting with the online tools. These findings can be explained from Krashen's 'affective filter' theory (Krashen, 1985), emphasizing low

affective filter as one major factor for second language acquisition.

In addition, the aspect of interaction in the classroom with peers and teachers also contributed to the learning achievement. Although the online component of this BL course also supported the communication among the students and the teacher, it was not synchronous or real-time. The teacher presence in the classroom and real-time feedback from the teacher and their peers encouraged the students who might not be successful when studying alone online.

From a sociocultural theory of second language learning, language learning is a production of interaction and based on the social context. Therefore, most second-language learning still takes place in a face-to-face classroom context. Although online content can help prepare the students and enhance practicing time, teachers have to play major role in promoting student's engagement and increase their learning (Johnson, 2013).

This is especially true for the EFL context. Nakazawa (2009) emphasizes that language learning requires a certain level of human-to-human interaction. Some EFL skills can be acquired through self-study, but some skills need to be learned through interacting with other people under the guidance of a teacher. This insight supports the BL course in practical English phonetics.

Consistent with this study, Johnson and Marsh (2013) introduced one research project integrating face-to-face and online

learning for promoting sufficiency English proficiency level for EFL learners in Chile, Mexico, and Spain. They confirmed that the BL model could extend students access to course content outside of the classroom, which results in the increasing opportunities for meaningful student-to-teacher and student-to-student interaction in the classroom.

The effectiveness of the BL course in Practical English phonetics was confirmed by the experts in IT Education. They perceived that learning and teaching via LMS highly support the learning. This was the result of the LMS aspects that enrich the learning process in general and even more for foreign language learning. The aspects included

1. Easy access to the LMS
2. The lesson topics and the content menu have a clear vision and easy for searching.
3. The LMS supports class participation and assignment submission online.
4. The test practice function of the LMS is helpful.
5. Communication between students and a teacher increase a better understanding of the course content and class activities.

The result is supported by research on the 'online environment', indicating that successful BL courses must be learner-driven and not technology-driven. As Colpaert (2004) suggested, an appropriate online environment must be conceived and developed to provide support to learning online and must focus on

learners' needs.

The survey result from the experts illustrated that the LMS component of the BL course has an effective online environment, including rich input in terms of authentic video, audio and texts providing meaningful content relevant to learners' needs. This could not be possible without the thoughtful application of second language pedagogy.

The result of this study is consistent with King (2016)'s research on teaching and learning with the BL environment. King confirmed that the format of the learning environment encourages learners only if the technology is used appropriately. More importantly, the role of the teacher in choosing a supportive learning environment according to the task or skill to be practiced is crucial.

The experts' positive perception toward the BL system was consistent with the results of the students' survey. The results showed that the participants were satisfied with the BL course at a high level. This could contribute to the benefits of IT and the humanistic aspect in the classroom.

The online components and the interaction in the classroom promote both student-centered learning and collaboration, which enhance the learning achievement. This results in high satisfaction toward the BL course suggests that the course design need to be

1. Fully cover the content with a reasonable degree of challenging suit to the students' ability

2. Test practices are relevant to the course content and promote the learning outcome.

3. The content is applicable to the students' life.

4. Access to the system and the application is convenient and user-friendly.

5. Pedagogical aspects include clear voice narration, a reasonable amount of assignments and score reports and feedback at the appropriate time.

The participants' positive perception toward the BL course was in line with Oweis (2018)'s study on EFL students' motivation to learn through BL format in Jordan. Oweis confirmed that the novelty of technology could increase students' interest and motivation to learn. When students have the internal motivation to learn a foreign language supported by student-centered pedagogy, they will be more willing to engage more and focus more on their learning, which will contribute to their learning achievement.

Recommendation

This study recommends the following based on the results.

1. As the study results show that students performed better when BL was employed, the practice should be applied to other English skills for EFL learners in Thailand.

2. Future studies should include both quantitative and qualitative research designs to gain richer findings and insights employing the BL approach

3. Universities should support faculties in terms of time, resources, IT staff and moral support to promote more BL research

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