An Analysis of University Freshman Students' Satisfaction in Using On-line English Practice Exams

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ABSTRACT

The aims of the study focused on university freshman students' satisfaction in taking on-line English practice exams and applicable ways to improve the exams through students' perspectives. The targeted university first cooperated with American Magazine Center (AMC) in the first semester of academic year 2011 to develop appropriate on-line English practice exams for its freshman students hoping that it could strengthen students' English proficiency. The participants were freshman students who have experienced a semester of college level English class that required them taking mandatory on-line English practice exams. A questionnaire designed and piloted to investigate students' satisfaction toward on-line English practice exams was employed to collect data. The results of the study indicated that students' satisfaction toward self-learning achievement reached a statistical significant level. Students' satisfaction toward combination of class design with practice exams, teaching with practice exams, and learning environment also reached statistical significance respectively. Based on the findings of the study, students considered an English class combined with mandatory on-line practice exams was useful in terms of motivating their innate willingness to learn and enhancing their English proficiency. According to the results of this study, implications are made for the successful implementation of on-line English practice exams in freshman English courses.
Keywords: Satisfaction, On-line English practice exams

INTRODUCTION

Thanks to the fast development of computer technology, Computer-Assisted Language Learning (CALL) and computer related evaluation methods have been widely conducted in classes (Wang 2006). Whether there is a need and value to provide students with web-based learning environments in academic settings has been argued and debated for years (Collis, 1997).

In Taiwan, colleges and universities are the places where computer assisted teaching technology is mostly applied and evaluated (Chou & Liao, 2008). Nowadays, applying diverse activities that integrate with technology to help students in learning and develop students' independent thinking is in favor and is also the tendency of school's curriculum (Liang, 2004). In addition, the majority of teachers also have strong faith in the effectiveness about using computer technology in language classrooms. Although teachers' beliefs can have a significant impact and often carry a critical role in terms of success in teaching, it is very important for researchers to probe into students' perceptions to understand whether computer-assisted teaching methods can be beneficial in their learning.

In Taiwan, it is mandatory for university and college students to take English classes in their freshman years regardless their academic majors. Consequently, most freshman college students are required to take English classes in their first academic years. Each higher education institution also has its own English proficiency standard that students have to follow in order to graduate. Generally, the graduation threshold ranges between the intermediate to high intermediate levels of the General English Proficiency Test (GEPT). The participants of this study were college freshman students who were exposed to a semester of English class that required them taking mandatory on-line English practice exams developed by American Magazine Center (AMC). The ability levels of the practice exams range between the intermediate to high intermediate levels of GEPT or the scores above 550 in TOEIC in ETS standard (see table one).

Table 1: English Proficiency Tests Comparison Table

GEPT	CEF	TOEFL-CBT			TOEIC			IELTS	
		A (Executive Yuan)	B (ETS)	C (LTTC)	A (Executive Yuan)	B (ETS)	C (LTTC)	A (Executive Yuan)	C (LTTC)
Elementary	A2	90(above)	-	173	350(above)	-	650	3(above)	4
Intermediate	B1	137(above)	137(above)	213	550(above)	550(above)	750	4(above)	6
High-Intermediate	B2	197(above)	-	250	750(above)	-	900	5.5(above)	7
Advanced	C1	220(above)	220(above)	287	880(above)	880(above)	990	6.5(above)	8.5
Superior	C2	267(above)	-	287(above)	950(above)	-	990(above)	7.5(above)	8.5(above)

Retrieved from Language Training and Testing Center (LTTC) No.0940065062, Taiwan (2005). Translated and reorganized by the researcher (2012).
www.lawbank.com.tw/lawnews/941111a.doc

The Purpose and Rationale of the Study

In a traditional class setting, more often than not, teachers give tests or quizzes to evaluate students' learning progress during class time. Although the traditional evaluation methods seem to be straightforward, it may appear to be time consuming and stressful for learners. Since incorporating technology and e-learning in class is an inevitable trend, it is important for teachers to consider using computer-related evaluation methods. Consequently, adopting on-line practice exams that allow learners to take anytime anywhere have become an alternative choice for teachers. However, the potential disadvantages of taking exams on line may include technical difficulties or system instability. Despite the potential advantages and disadvantages, the significance of this study is to examine the issue through students' perspectives about whether taking practice exams on the internet can motivate students in learning and help them reach their learning goals.

An abundant research in the effectiveness of e-learning and computer-based teaching and testing has been made available for educators, however, not much study regarding students' opinions or satisfaction toward computer-assisted evaluation has been done. Although a teacher's knowledge plays an important role in class, the degrees of students' absorbance and satisfaction should not be ignored. Since education is designed to help students in learning, in this study, it is necessary to analyze the implementation of on-line practice exams from learners' perspectives. The purpose of this study is to analyze students' satisfaction toward: (1) learning environment, (2) combination of class design and practice exams, (3) combination of teaching and practice exams, (4) self-learning achievement.

Research Questions

The research questions of this study are as follows:
1. Are students satisfied with the implementation of on-line English practice exams in class?
2. What factors may strengthen the applicability of on-line English practice exams in class?

The research questions are aimed to study students' satisfaction toward the implementation of on-line English practice exams. By investigating students' satisfaction, researchers may provide a better understanding whether utilizing on-line practice exams in college English classes is practical and feasible. The results of study may bridge the gap between educators' and learners' perspectives in order to reach a balance.

LITERATURE REVIEW

Computer-assisted Language Learning and Assessment

Due to the economic growth and globalization, Taiwan has already been recognized as one of the four Asian Tigers (Hong Kong, Singapore, South Korea, and Taiwan). The U.S. became Taiwan's second largest export customer in 2007 and Taiwan's total export amount was US 236 billion in 2008 (Workman, 2009). In order to maintain and promote economic prosperity, it is necessary for the government and the education system to ensure that Taiwanese citizens are equipped with satisfied English proficiency. The government and business entrepreneurs gradually set up their threshold of language proficiency for future employment. Depending on the profession, more often than not, one has to pass elementary or intermediate levels of the General English Proficiency Test in order to obtain an interview opportunity. As a result, short term language schools (including cram schools and college extension departments) that provide intensive classes with computer technology to help learners pass Standard English proficiency exams have become a flourishing

business in Taiwan. The popularity of combination between language learning and computer assisted teaching may be ascribed to an abundant research indicating that utilizing commuter technology in four of the language skills teaching can effectively increase learners' motivation and confidence (Chang & Lehman, 2002; Chu, 2004).

Although computer-assisted language learning (CALL) dated back in the 1960's, nowadays, computer-assisted teaching and on-line practice tests are common in language schools. In the beginning, Behaviorism utilized computer technology as a tutorial device for learners to drill and practice coursework. In Behavioristic CALL phase, computers were just a machine that provided concrete answers for their learners and the system was lack of interactions. In the latter period, Congnitivism rejected Behaviorism and declared that computer-assisted learning should focus on the use of forms of language not the drill of the forms. Hence, computer-assisted language learning tended to be learner-centered and interaction-oriented (Warschauer, 1996).

In Taiwan, the government's efforts to promote e-learning environment started in 1997. Since then, e-learning has been experimented in information technology, education, English learning, and various multimedia programs (Golub, 2010). In fact, many studies have suggested that language class teaching has become much functional with the help of computer technology and evaluation. Especially, the majority of students recognize the positive learning experience they gained from computer assisted teaching and assessment, and they appeared to be satisfied with it (Oliver and Omari, 2001). Experts in the field have recognized the influence of e-learning because it can significantly strengthen the communication between students and teachers. For example, teachers can assign homework or extra curriculum readings through e-learning platforms to help students further study a subject. On the other hand, students can also conveniently submit assignments via on-line tools to the instructor or exchange information with their peers quickly through e-mail. "And even very shy students find it easy to communicate with their teachers via e-mail. Last but not least, the network, or the World Wide Web, is a virtual library at one's fingertips; it is a readily available world of information for the language learners and teachers" (Wang, 2006, p.4).

On-line English Practice Exams

In Taiwan, the majority of higher education institutions have, or are developing, accountable exams to assess their students' proficiency in English. In order to provide placement tests to all the college freshman students, many schools have cooperated with prestigious language training and testing centers to utilize computer and internet assisted exams to class their students. In this study, the database of on-line English practice exams system was designed and authorized by American Magazine Center (AMC), a prominent company that issues different levels of English magazines and provide learners with e-learning curriculum system. The AMC's e-Learning platforms include various teaching materials, students' resources, evaluation principles, and practice exams. Examples are as follows: (1) thematic interactive curriculum system, (2) stimulated GEPT testing system, (3) pronunciation interactive curriculum system, (4) vocabulary interactive curriculum system, (5) supplementary teaching interactive curriculum system, and (6) multimedia grammar interactive curriculum system (AMC, 2012).

After students are grouped in appropriate levels, schools would require students to take a certain rounds of on-line English practice exams in a limited time period. To operate the system, students first need to click into the school's website, then key in their IDs and passwords. The practice exams include a combination of multiple choice, short-answer, and long-answer questions in two hours duration. The system adjusts the difficulties of practice questions according to the test taker's levels. The advanced short-answer and long-answer questions have some blanks intended to have test takers enter the information in the passage, organize it and analyze it for the answer. By doing so, these practice questions examine students' language analytical abilities, not just their comprehension.

Learning Satisfaction

Tough (1982) explained the definition of learner satisfaction as leaners' attitudes, expectation, or perceptions toward certain learning events.

Where the student is happy with his/her studies or adopts an aggressive learning attitude, student is deemed to be "satisfied"; where the student is unhappy or adopts negative or passive attitude, student is deemed to be "dissatisfied".

Hence, student satisfaction could be perceived as the student's positive feelings or attitude towards his/her learning activities. The degree of student satisfaction is as the margin between "level of anticipation" and "actual results". A smaller margin would mean greater satisfaction and a larger margin would mean lower satisfaction (Chen , Hsiao & Lee, 2007).

Domer (1983) argued that the degrees of leaner satisfaction can be understood as a gap between a learner's expectation level and his/her actual gains. A learner is relatively satisfied when the gap between his/her expectation level is closer to his/her actual gains. In contrast, a learner may be dissatisfied when the gap between his/her expectation level is distant from his/her actual gains (as cited in Lee, 2008).

Also, satisfaction can be referred to the fulfillment of the needs, expectations, wishes, or desires (someone); or anything that brings gratification, contentment or pleasure to a person (Webster's New World College Dictionary, 1990). After a careful review of literature, in this study, learning satisfaction is defined as the fulfillment of students' learning in (1) learning environment, (2) combination of class design and practice exams, (3) combination of teaching and practice exams, and (4) self-learning achievement.

The satisfaction in learning environment indicates students' self-efficacy in operating the computer system and taking the exams. Combination of class design and practice exams denotes the connection of class schedule and the exams. Combination of teaching and practice exams means the correlation of teachers' instruction and the exams. Self-learning achievement refers to students' accomplishment during and after taking the exams. This study aims to investigate whether or to what degrees the previous four variables have been fulfilled in the class, though quantitative and qualitative study methods from students' self-reported information.

METHODOLOGY

Study Structure

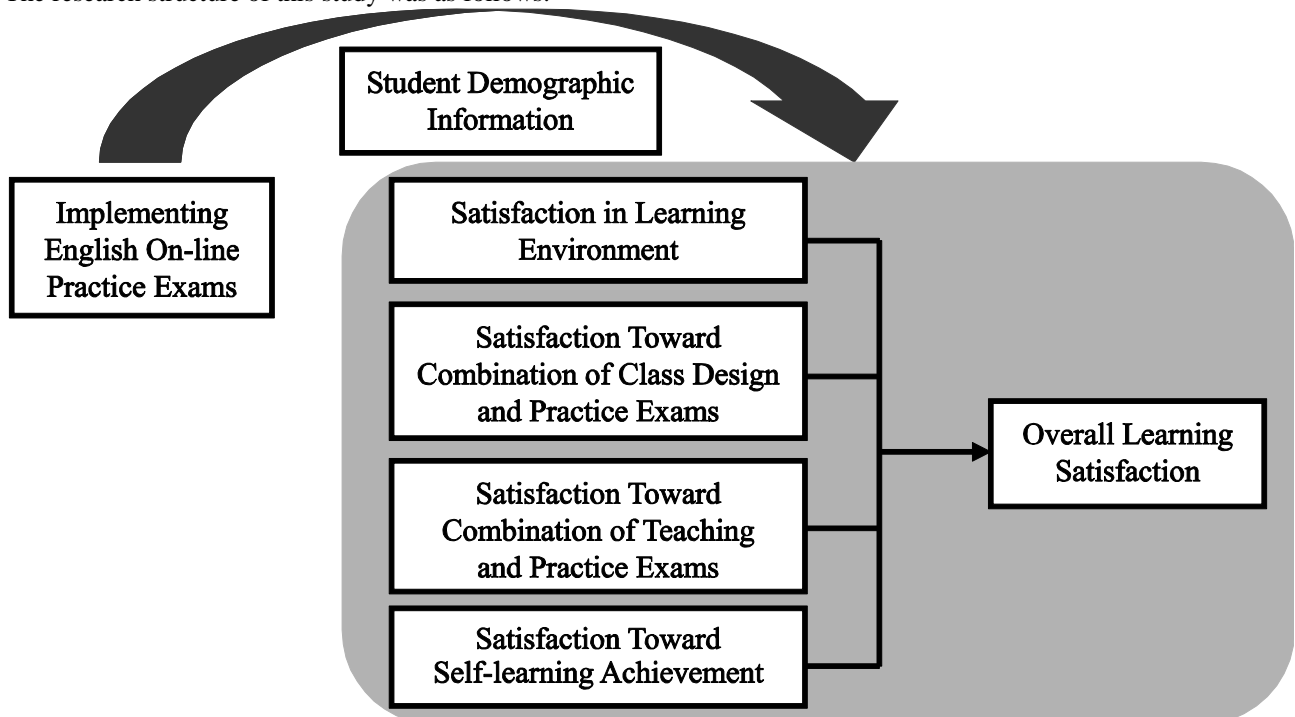The research structure of this study was as follows:

Figure 1: The Research Structure of This Study

Participations

This study was conducted at a traditional university in Taichung City, Taiwan. The school offers four-year programs for college students, six-year programs for dental students, and seven-year programs for medical students. The participants were 42 freshman students from different academic majors and were classed by placement tests. All the participants were exposed to a semester of computer-assisted language learning class that incorporated with mandatory on-line English practice exams.

Quantitative Method

The validity of the survey questionnaire was based on the review of literature and the authority of three experts in the TESOL field. To ensure the reliability of the survey questionnaire, the researchers distributed 25 questionnaires to students in a different class to evaluate the consistency of the questionnaire before the official measurement. After factor analysis, eight questions were eliminated, but the explanation of total variance was 84.3471% indicating that the survey was reliable. The Cronbach's α for the four domains were 0.8612, 0.8142, 0.7803, and 0.7721 respectively. Each domain's Cronbach's α was acceptable because each of them passed 0.7 (the required value).

Table 2: The Reliability of the Survey Questionnaire
Students' Satisfaction in Using On-line English Practice Exams

Domains	Cronbach alpha	Explanation Percentage
Learning environment	.8612	
Combination of Class Design and Practice Exams	.8142	.8109
Combination of Teaching and Practice Exams	.7803	
Self-learning Achievement	.7721	

The official questionnaire measured the participants self-reported level of satisfaction toward the implementation of on-line English practice exams in class. The questionnaire consisted of four items and 32 questions. For each item, students were asked to indicate their satisfaction on using on-line practice exams. The questionnaire adopted Five-Point Liker scale: 1 means Strongly Disagree, 2 means Disagree, 3 means Natural, 4 means Agree, 5 means strongly Agree. A total of 42 questionnaires were printed in papers and were distributed to the participants. The researchers used SPSS 14 to analyze the collected data. The descriptive statistical analysis methods included: frequencies, and percentages, mean values, and standard deviations.

Qualitative Method

This study also adopted qualitative research methods, including observations, interviews, and reflections to identify what factors may strengthen the applicability of on-line English practice exams. First of all, the instructor was asked to keep a journal to observe and record students' responses in learning. Secondly, after the mid-term and final exams, the researchers interviewed ten students (randomly selected by their student ID numbers) with open-ended questions regarding their learning experiences respectively. To ensure confidentiality, each participant was identified by a unique number in writing. This procedure could reduce the risk of the loss of privacy. During the process of interviews, the researchers took notes and tape recorded the conversation with the participant's consent. After each interview, the notes and the resulting tape were organized and transcribed on papers. Last but not least, the researchers compared the instructor's journal and students self-reported information after the interviews to find out the promising factors that had the potentials to improve the implementation of on-line practice exams in college English classes. The interview questions were piloted by the researchers in advance and they are as follows:

1. What do you feel about an English class that requires students taking mandatory on-line English practice exams?
2. What do you feel about the learning environment in this class?
3. What can the instructor do to better help you reach your learning goals?
4. What else can be improved regarding the operation of on-line English practice exam system?
5. Overall, what satisfy you in your learning experience with this class?
6. Overall, what dissatisfy you in your learning experience with this class?

DATA ANALYSES

Quantitative Analyses

A total of 42 questionnaires were printed in papers and were distributed to the participants. The valid response rate of the formal survey was one hundred percent.

Table 3: Student Demographic Information (N=42)

Variable		Frequency	Percentage
Genders	Male	22	52.38%
	Female	20	47.62%
Years You Have Studied the English Language	Under 3 Years	0	0.00%
	3-4 Years	1	2.38%
	4-6 Years	10	23.81%
	6-9 Years	18	42.86%
	9-12 Years	11	26.19%
	12 Years and Up	2	4.76%
How often have you practiced the School's on-line English Practice Exams?	Under 7 Times	0	0.00%
	8-10 Times	28	66.67%
	11-13 Times	9	21.43%
	14-16 Times	5	11.90%

The analysis in table three and figure two indicated that 52.38 % of the participants were male and 47.62 % of the participants were female. Regarding students' years of study in English, the majority of students (42.86%) have 6-9 years study experiences; 26.19% of students have 9-12 years; 23.81% of students have 4-6 years; 4.76 % of students have over 12 years and 2.38% of students have 3-4 years respectively. Table three and figure two also indicated how often students have used the on-line English practice exams in the semester. The majority of students (66.67) have practiced the exams for 8-10 times; 21.43% of students practiced for 11-13 times and 11.90% of students practiced for 14-16 times respectively.
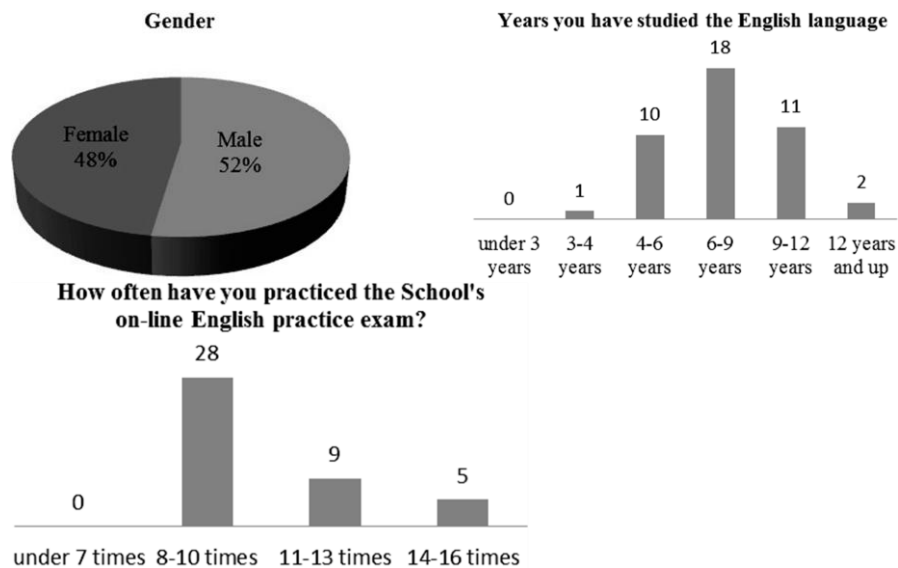

Figure 2: Student Demographic Information (in pie chart and bar charts)

The domain analysis in table four indicated that students were overall satisfied with the implementation of on-line English practice exams. Based on Five-Point Liker scale, the degrees of students' satisfaction in the four domains in

order were as follows: (1) self-learning achievement (4.2876); (2) combination of class design and practice exams (4.0123); (3) combination of teaching and practice exams (3.8761); (4) learning environment (3.6314).

Table 4: Domain Analysis of Students' Satisfaction in Using On-line English Practice Exams

Domains	Mean	S.D.
Learning Environment	3.6314	0.7218
Combination of Class Design and Practice Exams	4.0123	0.5234
Combination of Teaching and Practice Exams	3.8761	0.8767
Self-learning Achievement	4.2876	0.6328

N=42

Qualitative Analyses

In order to have an in-depth understanding regarding what factors may strengthen the applicability of on-line English practice exams, the researchers conducted qualitative research methods after statistical analyses. Based on the comparison of the instructor's journal and students' interviews, the researchers have located and organized some promising factors that may serve as teachers' references to improve the applicability of implementing on-line English practice exams in college English classes. The results were organized below:

1. An English class required students taking on-line practice exams seemed stressful in the beginning. But after a few practices, students found that the system was user friendly. Most students self-reported that they are comfortable taking practice exams on line. Students found the practice exams very meaningful because the system not only provided answer keys but also offered explanations in details for each practice question. As such, students could learn from their mistakes and score better next time.

2. Most students self-reported that a welcoming learning environment was created by the instructor for his patience and inspiration. The instructor was not only knowledgeable in both ESL instruction and computer assisted teaching but he also explained his class and required assignments clearly. The instructor's encouragement and supervision created a positive learning atmosphere.

3. The instructor could consider distributing some class time to answer the practice questions that students had problems with. Therefore, students may not always understand the explanations offered by the test system and they may not find time to ask the instructor questions after class. In addition, it is suggested that the instructor could use visual materials to help students understand some unfamiliar things. For example, some Taiwanese students have no idea about the sauce "guacamole" that appeared on a reading comprehension test. Instead of explaining what guacamole was made of, the instructor could have used the internet to show students what it looked like in order to help their understanding.

4. Although the on-line exam system appeared to be stable most of the time, it could freeze or even crash around the deadlines when there were too many people logging in the system. The database provider should improve the system or the instructors from different classes may set up different deadlines.

5. Most students self-reported that they are satisfied with their learning experience with on-line evaluation because it is less stressful than taking pop quizzes in class with other classmates. Many students reported that they were less active in the morning and the afternoon especially after meals, but they could concentrate better in the evening. Since the on-line practice system could be taken anytime, anywhere before the deadline, students considered the system could fit their biological clock and was very convenient for them.

6. The majority of students reported that they may feel nervous about the exams, but they were overall satisfied with the class. Although many students had taken some on-line English tests before, they did not have much on-line evaluation learning experiences in high school. In the beginning, the class appeared to be a great challenge and it triggered their anxiety to a certain degrees. It took the instructor's encouragement and patience to ease students' nervousness.

CONSLUSIONS AND SUGGESTIONS

The results of this study suggested that students' overall satisfaction toward the implementation of on-line English practice exams reached a statistical significance. First of all, students' self-reported satisfaction toward self-leaning achievement was the most significant factor among the four domains. This result indicated that students were not only satisfied with their experiences with on-line English practice exams but also gained a sense of achievement after each practice. Also, in the questionnaire, a significant number of students (85%) gave very high score (average 4.28) for the survey question indicating that on-line practice exams motivates their innate willingness to learn.

The second important factor was students' satisfaction toward combination of class design and practice exams. This result showed that students believed the class design and teaching materials should be related to the practice exams. The majority of students (83%) recognized that the teaching plans matched their learning goals. Next, students' satisfaction toward combination of teaching and practice exams also reached a satisfied level. This finding suggested that students have confidence in the instructor's expertise and his patience. Based on the questionnaire, 78% of students scored highly (average 4.12) for the question indicating that students were satisfied with the instructor's teaching in class and explanations for the on-line practice questions.

Last but not least, satisfaction in learning environment was also satisfactory among the four domains. This result showed that on-line English practice exam system is acceptable to students. In the questionnaire, 71% of students scored (average 3.74) for the question indicating that the on-line practice exam system is user friendly and the answer keys provided by the system were very helpful.

In addition, qualitative results showed that compared to the traditional pop quizzes in class, students tended to favor on-line evaluation and they were less stressful when they could take exams on the internet. Many students reported that the answer keys and teachers' explanations greatly helped them learn from their mistakes so they kept improving their language proficiency. A surprising discovery came from the interviews for students self-reported that taking mandatory English practice exams at home is less stressful and better fit their learning rhythm as well as their biological clock.

Based on the findings of the study, students considered an English class combined with mandatory on-line English practice exams was practical in terms of motivating their innate willingness to learn as well as enhancing their English proficiency. The analyses of this study suggested that the implementation of on-line English practice exams is applicable; its quality and effectiveness were recognized by learners. According to the results of this study, implications were made for the successful implementation of on-line English practice exams in college freshman English courses. However, the key factors to make the implementation of on-line English practice exams viable and to strengthen the applicability of the exams would depend on teachers' inspiration to help students gain a sense of achievement, the quality and consistency of class design, teachers' expertise and patience, teachers' supervision, and improvement of on-line system.

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