

A survey on college students' attitudes toward English e-tutoring websites

¹Paul Juinn Bing Tan, ²Yao Hui-mei, ³Chia-Hung Max Lin, ⁴Ming-Hung Hsu

National Penghu University of Science and Technology
No.300, Liuhe Rd., Magong City, Penghu County 880, Taiwan
Magong, Penghu, Taiwan

¹pashatan@yahoo.com.tw; tanjuinnbing@gmail.com, ²jessyhm@gms.npu.edu.tw, ³chmaxlin@gmail.com, ⁴hsu@gms.npu.edu.tw

Abstract

Using the TAM Model to investigate college students' attitudes toward English e-tutoring websites has rarely been conducted from an information technology and global e-digital market perspective. The present study re-examined the utilization of self-paced e-learning websites for business English based on the assessments of university students. The findings were as follows: 1. Most users of English e-tutoring services believe that the use of such services in learning English provides greater value and convenience than non-online alternatives. This belief can assist the web designers of such websites in the maintenance and enhancement of users' loyalty to the sites if the web designers take care to ensure the quality of the sites' e-content. 2. Site designers should also endeavor to ensure that students' requirements regarding functions relating to knowledge management and website interactions are met such that the students can operate the sites with greater ease as they engage in the learning process. 3. To provide a better understanding of the interface design quality.

Key words: computer assisted language learning (CALL), TOEIC (Test of English for International Communication), TAM (Technology Acceptance Model), CBA (computer based assessment)

Introduction

According to the British Council report, it is estimated that 30 million people will speak English in 2015 worldwide. The new growth markets for English are largely the developing world. China and India show an enormous need for English learning; English has become an important part of school curriculums, and certain countries use English as their first and official language. English is spoken by at least one-quarter of the world's population and has become a vital means of improving an individual's prospects for well-paid employment (Williams 2013). There are many types of English proficiency tests: GEPT, TOEFL, IELTS, and TOEIC. Multinational companies now communicate in English.

TOEIC is biased towards business; therefore, it has been well-received by the business community. The TOEIC test is often a major requirement for the selection of personnel. TOEIC can be divided into many types of learning styles, such as: an achievement test, placement test and proficiency test.

As a matter of fact, the teaching and learning activities of English programs still emphasize a test-oriented approach in China (Lin Pan& David Block 2011) and in other Asian communities (Kuba, 2002).

Computer-Based Testing

Computer-based testing, with or without CAT technology, offers these advantages:

- Classroom-based testing
- On all aspects of self-directed language tests
- High-risk practices for upcoming standardized tests

The demands of English Language Teaching (ELT) or English Language e-learning for English Language Learners (ELL) in the U.S. are substantially different from learners of English in international settings. Consequently, instructional and tutoring e-programs and e-digital products for each vary substantially. The report indicated that the worldwide market for English Language Learning (ELL) is among the fastest-growing and largest of all the sectors in education (2012-2017), as shown as table 1.

Motivations of research

Of the all the languages of the world, English is the one that has come to be used most widely, such that it functions as something like a global common language. Moreover, TOEIC has become a standard for recruiting employees in many companies in Asia.

The goals of the present study were as follows:

- To achieve a better quality of e-content for digital engineering.
- To provide a better understanding of the interface design.

Research questions

1. Does using the internet have a positive impact when studying for the TOEIC?
2. Does using the internet to practice for the TOEIC improve student's TOEIC score?

More and more people worldwide are making efforts to learn English. In certain parts of Asia, for example, learners have a general preference for conventional 'classroom-based learning' provided at the campus of a UK partner or other overseas partner, with said preference commonly being motivated by the perceptions and expectations of local employers. Relatedly, it has been observed that distance learning involving increased levels of blended learning, in which students are given the opportunity to gain experience in local facilities, is increasingly being utilized in order to adapt to the challenges posed by this preference among learners.

- It has been estimated by the British Council that one out of every four people worldwide speaks English with some degree of competence.

- Already, the country with the largest number of English speakers may be China.
(<http://voiceboxer.com/english-in-china/>)

It is estimate that over 300 million people in China learn to speak English. This large population of English learners in China is at least as large as the entire native-speaking population of the U.S.A.

- E-tutoring networks are a normal and growing phenomenon in the global market.

The Global ELL market—services, fees, tests, and products/content—is and will remain a large market.

Trends for Growth

- A working knowledge of English improves job prospects globally, and parents, schools, students, and employers understand this.
- Global middle-class growth and wealthier, more ambitious parents are leading to the expansion of private providers of English, particularly in Brazil, China, Turkey, and India.
- Online opportunities for learning English internationally have not yet achieved significant traction but will do so, particularly at the postsecondary/adult level.
- ELLs in the U.S. are currently 11% of the total PreK-12 enrollment. By 2015, ELL enrollment will achieve 10 million people, representing 19% of all students. By 2025, one in four students nationwide will be an ELL, as shown in table 2.

Literature review

A study by Tan (2013), which examined teaching and learning, stated that they essentially constitute two sides of the same coin. Moreover, an investigation of the degree to which e-learning is accepted by university students indicated that various models, including the recently proposed E-learning model, should be used (Tan, 2017).

It is critical to use the E-learning Acceptance Measure (EIAM) for the collection of data regarding the reactions that students have to the teaching of lessons through e-testing or e-learning. A clear picture of the degree to which students accept e-learning can, in turn, enhance how well we understand students' behaviors when using computers. Relatedly, teachers can be guided by such information when making decisions about how to allocate resources, as well as what teaching strategies and instructional designs to utilize. In short, knowledge of this type has important implications for all those with a stake in educational efforts (Teo, 2010). The study by Teo presented evidence regarding the EIAM's factorial structure, and so educational researchers may find the study to be illuminating.

TOEIC (Test of English for International Communication)

The Global Self-paced eLearning Market from 2013-2018

The Ambient Insight Premium Report's "A global Digital English Language Learning Market" proposed by Sam S. Adkins (2014) showed that "The top buying countries throughout the forecast period are China, the US, South Korea, Japan, and Brazil. In 2013, China barely edged out the United States to become the top digital English language learning buying country in the world." We cannot ignore the largest buyers in the Worldwide Self-paced eLearning Market in the Asian regions. These top ten buyers are shown in table 3 below for 2013-2018:

TOEIC growth in Taiwan

In Taiwan, the TOEIC test began to be administered in 2002; however, it was not very popular at that time.

Additionally, in 2005, many people began taking the TOEIC test for many different reasons. In 2017, the ETS test of TOEIC (2016) showed that 393,410 people took the TOEIC test. (table. 4)

According to research on individual's motivations for taking the TOEIC test in junior high school and at university, there are 70% of junior high students who feel that the TOEIC will help them apply to better universities, and 92% feel that the TOEIC test will help them find the job they want (<http://www.toeic.com.tw>).

Theoretical background-TAM Model

The TAM (technology acceptance model), which was designed by Davis (1986), was based on the TRA (theory of reasoned Action) and TPB (theory of planned behavior) models. TAM provides a means to explore how e-learning methods relate to user's beliefs, attitudes and intentions and has implications for research regarding e-users' behaviors. According to Hong et al. (2006), the TAM constitutes the most generic and simplest model that researchers can use to investigate both the initial and continued acceptance of IT (information technology).

Method of Research

Participants

We collected data by using questionnaires and a literature review. Specifically, we developed a questionnaire that was used to measure the perceptions of Taiwanese college students. A total of 400 of the questionnaires were distributed to students, and all 400 were subsequently returned. Of these, 397 were found to be valid, for an effective return rate of 99.25%.

All of the individuals who participated in the study were Taiwanese college students. The primary objective of the study was to gather data from these students about their usage intentions with respect to TOEIC E-tutoring websites. As noted above, said data was gathered through a questionnaire survey. It should be noted, meanwhile, that the majority of the survey respondents were female.

Instruments (TAM model. SPSS)

We used the TAM model to evaluate our questionnaire results to explore how using the Internet to learn the TOEIC will affect learners. After collecting the questionnaires, we used SPSS to analyze the responses and the basic TAM model to explore their relations. The questions used in the survey were

adopted from those used in a study by Venkatesh et al. (2003). In addition to collecting demographic information, the survey used a 5-point Likert scale (with 1=strongly disagree and 5=strongly agree) to gather data about the overt variables of the five constructs in the model.

Reliability

In our research, Cronbach's $\alpha = .914 \geq .7$. Scores above 0.75 are reliable; therefore, the score indicates that our research is reliable.

Result

We utilized the Statistical Package for Social Science (SPSS) to assess the data collected in this study. The composite reliability values had a range from 0.514 to 0.914, which exceeds the threshold value of 0.70 that is commonly recommended. The results regarding reliability are provided in Table 5.

Discussion

We researched the literature, collected original data, and verified the application of a well-accepted model of technology use. Previous literature suggested that E-learning benefits students, and this study evaluated students' sense of those benefits. The literature also generally supported the relevance of the TAM model for this type of reassurance. Three-hundred-ninety-seven subjects replied to questionnaires with 19 questions. We used SPSS to calculate the TAM coefficients, which were all statistically significant.

The findings are as follows:

1. The analysis results indicated that perceived usefulness (PU) positively affects the behavioral intention to use (BIU).
2. Perceived usefulness (PU) also positively affects attitude (ATU).
3. Perceived ease of use (PE) positively affects perceived usefulness (PU).
4. Perceived ease of use (PE) positively affects attitude (ATU).
5. Attitude toward using (ATU) positively affects the behavioral intention to use (BIU).
6. Using the internet to learn improves the learning motivation regardless of the location of participants.
7. Because the Internet is now considered to be incredibly easy to use; people are very likely to use it to study for the TOEIC test.
8. It is feasible to use the Internet to learn and practice the TOEIC test. E-TOEIC test. E-TOEIC test learners feel that it is convenient for them because they can learn about the TOEIC test whenever they want.

We used the TAM model to hypothesize relations between factors. The results of multiple regression analysis showed significant positive relations between the TAM model's various factors. These results led us to infer that the Internet is useful and that it enhances E-TOEIC test learner's resources.

Recommendations for future research

Future studies should focus on:

- Collecting data from different countries and other markets to increase the external validity.

- Using the Delone and Mclean's model to re-examine the quality of web-designed applications (Delone & Mclean, 2003).

References

- [1] Andrew Williams Jr.(2013). International Education Global Growth and Prosperity An Accompanying Analytical Narrative United Kingdom Government
- [2] Retrieved from:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/340601/bis-13-1082-international-education-accompanying-analytical-narrative-revised.pdf
- [3] Hong, S., Thong, J. Y., & Tam, K. Y. (2006). Understanding continued information technology usage behavior: a comparison of three models in the context of mobile internet. *Decision Support Systems*, 42(3), 1819-1834.
- [4] Kuba, Akiko. (2002). Strategies-based instruction in Japanese bigb schools. Unpublished master's thesis, Department of English, San Francisco State University.
- [5] Lin Pan& David Block (2011). English as a "global language" in China: An investigation into learners' and teachers' language beliefs System ,39(2011)391-402
- [6] Paul Juinn Bing Tan (2013). Students' Adoptions and Attitudes towards Electronic Placement Tests: A UTAUT Analysis. *American Journal of Computer Technology and Application* Vol. 1, No. 1, February 2013, PP: 14 – 24,
- [7] P. J. B. Tan and M. H. Hsu, "Developing a system for English evaluation and teaching devices," 2017 International Conference on Applied System Innovation (ICASI), Sapporo, 2017, pp. 938-941. doi: 10.1109/ICASI.2017.7988596
- [8] Sam S. Adkins (2014). The 2013-2018 Worldwide Digital English Language Learning Market. retrieved from: <http://www.ambientinsight.com/Resources/Documents/AmbientInsight-2011-2016-Worldwide-Digital-English-Language-Learning-Market-Overview.pdf>
- [9] T, Teo., Development and validation of the E- learning Acceptance Measure (ELAM), *Internet and Higher Education* (2010), doi:10.1016/j.iheduc.2010.02.001
- [10] Test of English for international Communication (2017) <http://www.toeic.com.tw>
- [11] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- [12] Website: The global English language E- learning market. Retrieved from:<http://www.ednetinsight.com/news-alerts/voice-from-the-industry/the-global-english-language-learning--ell--market.html>
- [13] WHAT ABOUT ENGLISH IN CHINA? retrieved from: <http://voiceboxer.com/english-in-china/>

Table 1.

Global Market Segment	2012 Market Value US\$ (In Billions)	Forecast CAGR 2012-2017	2017 Forecast Market Size US\$ (In Billions)
Global English Language Learning	\$63.30	25%	\$193.20
Higher Ed eLearning	\$48.80	25%	\$149.00
K-12 eLearning	\$16.60	33%	\$69.00
Educational Gaming	\$2.00	30%	\$7.40
Social &Virtual Learning/Communities	\$1.00	40%	\$5.60

Sources:<http://www.ednetinsight.com/news-alerts/voice-from-the-industry/the-global-english-language-learning--ell--market.html>

Table 2. U.S. ELL vs. International ELL: Market Segments

U.S. ELL	International ELL
PreK-5: Public school market. Sixty percent of ELLs at PreK-5. Eighty-five percent of ELLs born in the U.S. start school at K-1.	Institutional: PreK-12, tertiary; state and privately funded. Easily the largest and most accessible segment.
Secondary: Long-term ELLs; high failure/dropout rate, particularly Hispanics.	Supplementary/Tutoring: Private lessons/tutoring a growing global phenomenon; small groups, tutoring/cram schools; organized online options, such as sites offering online tutoring for public tests (e.g., TOEFL, TOEIC tests).
Adults: Community colleges, adult schools, vocational and technical schools. Growing need for immigrants to learn English; severe shortage of adult ESL programs.	Consumer/B2C: Potential for online and blended programs. Limited to date by lack of access and competition from other options.

Sources:

year	Population
2002	19, 263
2006	95, 211
2007	141, 740
2008	164, 213
2009	162, 968
2010	197, 463
2011	237, 322
2012	246,004
2013	298,150
2014	343,979
2015	376706
2016	393410

table. 4. The TOEIC growth in Taiwan 2017

Source : Test of English for international Communication

Table. 5 Reliability Statistics

Construct	Number of item	Mean	Standard Deviation	Cronbach's alpha
PEOU	4	13.02	2.82	.844
PU	4	13.49	2.73	.843
ATU	2	6.97	1.41	.514
BIU	5	17.49	3.15	.839
VLC	4	10.95	3.24	.887
Total	19	61.93	10.22	.914

Table. 3. Top Fifteen Digital English Language Learning Buying Countries for 2013 and 2018: A global Digital English Language Learning Market

	2013	2018
1	China	China
2.	The United States	The United States
3.	South Korea	South Korea
4.	Japan	Brazil
5.	Brazil	Japan
6.	India	The Russian Federation
7.	Taiwan	Turkey
8.	The Russian Federation	India
9.	Spain	Indonesia
10.	Turkey	Taiwan
11.	Canada	Poland
12.	France	Canada
13.	Germany	Spain
14.	Sweden	Mexico
15.	Mexico	Malaysia

Source: