# The Impact of Technology Use on Student Satisfaction in English Classes

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**Abstract:** This study aimed to find out if students' satisfaction in English classes is associated with the frequency of teachers using technology teaching support, such as E-learning or web-based learning resources. The participants for this study were students who enrolled in the author's classes and therefore were considered as convenient samples (n=151). They were given extra credits to complete the questionnaire that was designed for the purpose of this study. This study found that student satisfaction for English classes is significantly positively associated with the frequency of teachers using technology teaching support (r=.742, p<.01). Furthermore, after conducting Chi-square test, Pearson value showed that there were four items (Q 1, 2, 7, 17) student's satisfaction was significant different among three different programs (four-year program, two-year program, and five-year program.) In addition, six items (Q 1, 3, 5, 7, 8, 17) student's satisfaction appeared significantly different among freshmen, sophomores, juniors, and seniors. Lastly, limitation, implications and suggestions for further research are addressed. **Key Words:** technology use, E-learning, satisfaction

#### 1. Introduction and Literature Review

Teachers pursue innovative uses of technology for enhancing classroom delivery methods, accommodating a better communication with their tech-savvy students, demonstrating their progress in teaching style, and advancing their teaching effectiveness. A number of researches suggest that instructional technology used appropriately can result in overall positive outcomes such as increased access to resources, enhanced student communication and increased perceptions of learning (Althaus, 1997; McComb, 1994; Rowland, 1994). However, Turman and Schrodt (2005) claimed that students' satisfaction for the course and teacher may be negatively affected when they perceive that the teacher uses too much or too little technology. On the contrary, the indiscriminate use of technology for its own sake has drawn criticism as well (Lane & Shelton, 2001). Although teachers are facing the challenge of carefully integrating the use of technology while teaching, one thing is crystal clear today's college students enter the classroom with certain expectations for their teachers using technology to make the teaching/learning more interesting and diversified. Students respond with less positive feelings toward the course and teacher when their expectations are violated (Turman & Schrodt, 2005). Technology allows teaching to be tailored to the individual to a greater extent than is normally possible. As Larsen-Freeman (2011) stated, computer-assisted language learning (CALL) could adapt to diverse learners by analyzing their learning progress and then providing them customized feedback, eventually, improving their language proficiency. Most importantly, students will experience the pleasure of learning. This in turn can contribute to a positive learning attitude, as a result, leading to greater success in learning English.

English teachers continuously seek for a better solution to handle the class or deliver a lecture in a more effective way. As a novice or experienced teacher, making your class interesting and attractive may be a more appropriate solution nowadays. With the use of technology, students have more autonomy in what they choose to focus on, and result in using more language they are learning (Thorne, 2006). Technology is not simply contributing machinery or making authentic material or having resources available, but it also provides the learner with great access to the target language (Larsen-Freeman, 2011). Gradually, technology shapes how we view the nature of what learning really is. Kern (2006) indicated that the rapid evolution of communication technologies has changed language pedagogy and language use, enabling a new way to create and participate in the teaching-learning process. Though technology enhances language learning experiences, it also contributes to reshaping our understanding of the nature of language learning; therefore, technology should be integrated into the curriculum and not just added in without careful planning (Cameron, 2008). The purpose of this study is to explore what outcomes might result when the teacher uses technology

teaching supports while teaching. Would students' satisfaction to the teacher and the course be influenced in a positive way? Consequently, this study was guided by the following research question: RQ: Do differences in the use of instructional technology correlate with students' satisfaction in English classes?

# 2. Method and Findings

## 2.1 Participants

One hundred fifty-one students from the Applied English Department, where the author is currently employed, participated in this study. Participants (N=151) were distributed in three different programs, 13.2 % from the 5-year program, 7.3 % from the 2-year program, and 79.5% from the 4-year program. The gender composition of the respondents in this study was 29 males (19.2%) and 122 females (80.8%). The distribution of respondents by class level was shown with freshmen 46.4%, sophomore 3.3%, junior 9.9%, and seniors 40.4%. Participants' mean age was 20.36 with SD 2.04. 2.2 *Procedure* 

Students were asked to report their satisfaction for their English teacher's use of E-learning, multimedia resources, web-based resources, online communication forums, and presentation software such as PowerPoint while teaching. A 5-point Likert-type scale, ranging from 1 (strongly agree) to 5 (strongly disagree), was used. A questionnaire, "Use of Internet and E-learning Student Satisfaction Survey" was designed purposely for this present study. Questions mainly covered two aspects. The first was how well their teachers used E-learning or web-based resources and their satisfactions (Q 1, 2, 3,4,5,18), and the second focus was students' preference of using online technology for learning English (Q 6,7,8,9,10,11,12,13,14,15,16,17). The alpha reliability for this present study was .876 with an M=37.808 and SD=7.838.

## 2.3 Findings

To answer research question, the Pearson r was conducted. The analysis revealed that students tend to be more satisfied with the course when the teacher utilizes technology such as providing teaching resources, r=.742, p < .01. Thus, this explained 55% of variance in students' positive feedback for learning English via web-based approaches. Their satisfaction to the course was likely enhanced when the teacher incorporated technology use while teaching. Descriptive statistics were applied to analyze the data. In order to understand if there are any differences in student satisfaction to the course when the teacher uses technology resources among different programs, years, and genders, Chi-square test was computed. Within 18 questions, there are four items (Q 1,2,7,17) among three different programs and six items (Q 1,3,5,7,8,17) which showed significant difference among four-year students. But among genders, there is no significant difference indicated. Details are listed on the following two tables.

Table 1: Significant Items of student satisfaction between different programs.

Item Descriptions	Pearson Chi-Square	Degree of Freedom	Sig.
_	Test Value		
1. My teacher is very skilled at using	19.205	6	.004
the Internet and E-learning platform.			
2. My teacher's responses are faster due to the	13.508	6	.036
use of the Internet and E-learning.			
7. I feel it is convenient to use E-learning.	16.808	8	.032
17. Personally, I like the sense of diversity and	13.856	6	.031
richness of the Internet or E-learning.			

*Note.* p < .05

Table 2: Significant items of student satisfaction between different years.

Item Descriptions	Pearson Chi- Square Test Value	Degree of Freedom	Sig.
1. My teacher is very skilled at using	24.471	9	.004
the Internet and E-learning platform.			
3. Because my teacher uses the	21.458	9	.011
Internet and E-learning while teaching, it			

makes me put more heart and effort into the			
course.			
5. My teacher's use of the Internet and E-	18.972	9	.025
learning make me more satisfied with the			
course.			
7. I feel it is convenient to use E-learning.	27.276	12	.007
8. I like to use the computer, the Internet, and	20.065	9	.018
multimedia to learn English.			
17. Personally, I like the sense of diversity and	21.201	9	.012
richness of the Internet or E-learning.			

*Note.* p < .05

#### 3. Discussions

First, analysis of the results from this survey indicated that English teachers from the Applied English Department generally were very skilled at using the Internet and E-learning platform (84.2%), however, still a high percentage of students (61.6%) indicated that they hope there will be more teachers using web-based resources or E-learning while teaching. Seventy-three percent of students felt the E-learning platform was convenient to use. Students liked using this platform not only to interact with classmates and upload assignments, but also to take quizzes, or exams, with percentages ranging from 43.7% to 69.5%.

Second, student satisfaction also was reflected in a high percentage of positive feedback on teachers using web-based or E-learning resources while teaching. For instance, students felt that teacher's responses were faster (64.9%), and it made them willingly put more heart and effort into the course (59.6%). Additionally, they judged their teachers to be more professional (67.6%), which resulted in their satisfaction with the course (57.6% to 64.3%).

Third, the result of analysis once again strongly confirmed that because students live in a modern society nowadays, their learning styles have changed. Eighty-five percent of students indicated that they like using computers, the Internet, and multimedia to learn English due to the diversity and richness of web-based learning resources. Furthermore, a high percentage of students (88.1%) indicated that their learning interest tended to be enhanced when the teacher used online resources.

Finally, very interesting data appeared when students answered a "traditional way/classroom" of learning." Above 40% of students marked "no comments" on two questions asked in a different way (Q 9 & Q 15). This might be interpreted that a traditional teaching approach still plays an important role in English classrooms nowadays. Yet, 60.2% of students responded that they prefer learning with involvement of the Internet or E-learning use, in contrast to traditional classroom blackboard teaching.

#### References

Althaus, S. L. (1997). Computer-mediated communication in the university classroom: An experiment with on-line discussion. *Communication Education*, *46*, 158-174.

Cameron, L. (2008). *Complex Systems and Applied Linguistics*. Oxford: Oxford University Press. Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, 40 (1), 183-210.

Lane, D. R., & Shelton, M. W. (2001). The centrality of communication education in classroom computer-mediated communication: Toward a practical and evaluative pedagogy. *Communication Education*, 50, 241-255.

Larsen-Freeman, D., & Anderson, M. (2011). *Techniques & Principles in Language Teaching (3<sup>rd</sup> ed.)*. New York: Oxford University Press.

Lightbown, P. M., & Spada, N. (2011). *How languages are learned*, 3<sup>rd</sup> ed. New York: Oxford University Press. McComb, M. (1994). Benefits of computer-mediated communication in college courses. *Communication Education*, 43, 158-170.

Rowland, L. M. (1994). Libraries and librarians on the Internet. *Communication Education, 43*, 143-150. Thorne, S. (2006). New technologies and additional language learning. *CALPAPER Working Papers Series, No.* 7. Pennsylvania State University.

Turman, P. D., & Schrodt, P. (2005). The influence of instructional technology use on students' affect: Do course designs and biological sex make a difference? *Communication Studies*, 56, 109-129.