Running head: EFFECTS OF WEB-BASED LEARNING

Effects of Web-based Learning on ESL Students

Benny C. Chang

San José State University

Abstract

Language is always a big issue for English-as-a-second-language (ESL) students' learning efficiency. Since more and more ESL students take English-based web-based learning (WBL) courses, how WBL curricula affect ESL students will be an important concern to instructional designers. The author of this article reviewed relevant literatures and pointed out the effects of WBL on ESL students.

Introduction

The Internet world is more and more popular that people in most countries get onto it, and people may get needed information quickly and conveniently from this virtual world. Since the Internet may break the time and space limits, the web-based learning (WBL) curricula are also becoming the newest, and the most powerful medium for educational use (Silc, 1998). Since English is the most common language in the Internet world, people noticed that there are a lot of ESL

(English-as-a-Second-Language) Internet users may improve

their English skills via using Internet; there are also teachers and instructional designers try to design English courses for ESL learner (Wang & Sutton, 2002). Thus, aspects of WBL will be an important issue for developing curriculum for ESL students.

World Wide Web: an English-based cyber world

In 1991, the World Wide Web (WWW) became public but was little used in higher education (Wang & Sutton, 2002). Since the original Internet system was developed in the U.S. and most early-stage common mainstream websites use English as their first language, English became the most popular language of the WWW world.

With the rapid increase of globalization in education, business and commerce, English language proficiency is becoming increasingly important for non-native speakers. Much of the WWW is written in English and a growing number of ESL adults are involved in WBL (Peterson, 1999). In addition, modern higher educators, researchers and students usually use the Internet to search data in worldwide databases. Besides, websites also

prompt learners to complete forms, send e-mail messages to political representatives, request information on travel destinations, and write comments for bulletin boards and guest books in English (Slic, 1998). Although non-English websites also become popular, English websites are still the mainstream of the cyberspace today.

Aspects of WBL

New industries are being created to offer training at a distance (Ko & Rosen, 2001; Kearsley & Marquardt, 1999).

Web-based distance education provides and opportunity to save costs in travel, housing, building new schools, and instructor salaries while offering the potential for self-paced, anytime, anywhere dispensing of learning (Menager-Beeley, 2001). At Foothill College of California, a 1997 survey showed a 20% attrition rate for regular classes and a 50 % attrition rate for classes offered at a distance (Mendrinos, 2000). These results are consistent with some findings for distance learning classes at other institutions (NCES, 1999; Primary Research, 2000).

But the results of WBL for ESL learners are variable. About the efficiency of English-improvement part of ESL learners, studies by Meem (1992), Chambless and Chambless (1994), and Grejda and Hannafin (1992) found that use of word-processing, use of a supplementary program that guides students through the writing process, computer conferencing, computer-based instruction, electronic mail, and World Wide Web page design had no significant differences on the writing quality nor attitudes towards writing between L1 elementary, middle school, secondary and college students who use technology and those who did not (Al-Jarf, 2000). About the efficiency of ESL learners learning through English websites, although web-based distance learning provides three benefits: no time and space limit, synchronous and asynchronous communication, and linear and non linear learning (Chen, 1998), there are still some problems that may impact the learning efficiency of students, especially for ESL students. For example, according to an observation of a WBL course by using WebBoard by Vazquez-Montilla and Zhu on 2000,

students had problems in logging onto the chat room at the same time and staying logged on throughout the chat session because of the unstable Internet connections. "Once a student is cut off from a chat session, he/she loses all the discussion threads even if he/she re-logs on again a few minutes later." (Vazquez-Montilla & Zhu, 2000) Technical problems also affect English speakers, but more seriously to ESL students, because ESL students need additional time and efforts to interpret English messages, and the suddenly interruptions may discontinue their thinking and impact both their learning and confidence. Thus, technical limitations are also a big issue for WBL, especially for ESL students who learn English or learn in English.

Specific factors that affect ESL students learning on Web General factors that affect WBL students learning are learners' linguistic knowledge, motivational barriers, language systems, e-course expectations, affective factors, language learning anxiety and his/her schema or background knowledge about topics

taught (Canning-Wilson, 2000). Specific factors that affect ESL students listed above are language systems and language learning anxiety.

In native English speakers' view, all non-English speakers are ESL persons; but there are still many differences between ESL students from different countries or area. For example, ESL students from Europe or Latin America may learn English much easier than those from Middle East or Asia, due to the different language systems. For those who use spelling languages such as French, Germany or Spanish, English pronunciation and grammar are similar to their mother language; on the other hand, English grammar and pronunciation may be a whole new issue for those non-spelling language users such as Chinese or Arabians. That means those non-spelling language ESL students may need more time to get used to read texts of WBL curriculum, unless they have solid English learning foundation. There are also similar problems when ESL students learn in class, but the teacher may notice and adjust the way and/or pace of

teaching immediately; for WBL courses, a ESL student may depressed and drop the course after got language problems, but the instructors may never know. Even if the student keeps learning, he or she may still feel anxious or depress for English issue and his or her learning may be affected strongly.

Conclusion

English will be the major language in cyber world in the predictable future, and the WBL will also become to an important method of education. For ESL students, WBL may offer a good way to improve their English, but also may be a barrier of learning. Instructional designers should put more effort in learner assessment when planning a WBL course for ESL students.

References

- Al-Jarf, R. S. (2000). Effect of online learning on struggling

 ESL college writers. Riyadh, Saudi Arabia: King Saud

 University.
- Canning-Wilson, C. (2000). E-learning, e-teaching,
 e-assessment: Aspects of course design for on-line web based
 courses used with EFL/ESL learners. Abu Dhabi, U.A.E.:
 Cert-Higher Colleges of Technology. (ERIC Document
 Reproduction Service No. ED 449788)
- Chambless, J., & Chambless, M. (1994). The impact of instructional technology on reading/writing skills of 2nd grade students. *Reading Improvement*, 31, 3, 151-155.
- Chen, L. (1998). Web-based distance instruction: Design and implications of a cybercourse model. St. Louis, MO: AECT. (ERIC Document Reproduction Service No. ED 423828)
- Grejda, G., & Hannafin, M. (1992). Effect of word processing on sixth graders' holistic writing and revisions. *Journal of Educational Research*, 85, 3, 144-149.

- Kearsley, G. & Marquaardt, M. J. (1999). Technology-Based

 Learning: Maximizing human performance and corporate

 success. New York: St. Lucie Press.
- Ko, S., & Rosen, S. (2001). Teaching online: a practical guide.

 New York: Houghton-Miffin.
- Meem, D. (1992). The effect of classroom computer use on college basic writers. Research and Teaching in Developmental Education, 8,2, 57-69.
- Menager-Beeley, Rosemarie (2001). Student success in Web Based

 Distance Learning: Measuring motivation to identify at risk

 students and improve retention in online classes. Orlando,

 FL: In WebNet. (ERIC Document Reproduction Service No. ED

 466608)
- Mendrinos, R. B. (1997). Using educational technology with at-risk students. Westport, CT: Greenwoood Press.
- National Center for Educational Statistics (1997). Distance education in postsecondary education institutions. NCES

- 98-062 U.S. Department of Education, Office of educational Research and Improvement. Retrieved October 5, 1999, from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000013
- Peterson, M. (1999). World Wide Web resources for the ESP practitioner. English for Specific Purposes, 18, s75-s80.
- Slic, K. F. (1998). Using the World Wide Web with adult ESL learners. Washington, DC: NCLE. (ERIC Document Reproduction Service No. ED 427555)
- Vazquez-Montilla, E., & Zhu, E. (2000). Preparing ESOL teachers

 using Web-Based Learning: Strategies and tactics. Fort

 Myers, FL: Florida Gulf Coast University. (ERIC Document

 Reproduction Service No. ED 444374)
- Wang, L. C., & Sutton, R. E. (2002). Effects of learner control with advisement on English-as-a-Second-Language students in a Web-Based Learning environment. *International Journal of Instructional Media*, 29, 3, 317-415.