Individualized Teaching and Autonomous Learning: Developing EFL Learners' CLA in a Web-Based Language Skills Training System

Zhihong Lu[*], Fuan Wen, and Ping Li

Beijing University of Posts and Telecommunications, Beijing, P. R. China

Abstract. Teaching listening and speaking in English in China has been given top priority on the post-secondary level. This has lead to the question of how learners develop communicative language ability (CLA) effectively in computer-assisted language learning (CALL) environments. The authors demonstrate a self-developed language skill learning system with materials development and its application in a teaching process. It was proved from collected research data that the system had a positive effect on improving learners' CLA, especially their listening and speaking skills.

Keywords: communicative language ability (CLA), listening and speaking skills, EFL, system, CALL environments.

1. Introduction

It has been highly emphasized from *College English Curriculum Requirements* that college English teaching in China should adopt "the computer- and the classroom-based multimedia teaching model" (Department of Higher Education, 2007). Teaching objectives have been shifted from English reading skills to listening and speaking abilities, with much emphasis on communicative language ability and autonomous learning ability. However, large class sizes and instructors' academic preparation make it difficult to meet the requirements. Information and communication technology (ICT) could contribute to the solution of this problem in that it makes it possible to tailor the subject matter, assess the individual needs of students (Volman, 2005, p. 18) and "permit each student to proceed at his own rate" (Skinner, 1968, p. 30), so as to facilitate differentiation and individualization in education. In recent years, many CALL systems provide rich learning content for students by Web Browser (Bergasa-Suso, Sanders,

& Tewkesbury, 2005; Wen, Zhang, & Tian, 2009). However, the interaction between students and the content in learning systems still needs further development.

2. A self-developed language skills learning system

2.1. To meet the needs in reality

According to Bachman (1990), language competence includes grammatical competence, textual competence, illocutionary competence, and sociolinguistic competence. A web-based language skills training system Rofall (Rainier Open Five Aspects Language Lab) has been designed and developed since 2008 and is based upon the implementation of more than ten top-notch national and city-level research projects hosted by the first two authors over the past five years. The system fits into a broad language teaching framework for the purpose of enhancing EFL learners' overall language competence, especially their listening and oral production skills, and integrates the Internet into college English classrooms. It allows the creation of a multi-media teaching environment, in which EFL learners can be highly motivated to learn and teachers are able to measure the improvement in their learning process.

2.2. Its role in EFL teaching and learning process

Rofall consists of three systems – Language Learning Smart Client (LLSC), Course and Teaching Management System (CTMS), and Resource Management System (RMS).

LLSC in Rofall is the key to keep the whole system reliable and stable and it enables EFL learners to conduct both in-class and out-of-class audio-video speaking activities, model tests, and questionnaires. Currently, it offers 18 different types of skill training task items which learners can choose from, combine, and sequence, and more items can be added if needed. The system contains over 10,000 items, including nearly 70 sets of national CET-4[*] and CET-6, 6,700 vocabulary items and 1,500 grammar training items. EFL learners' overall CLA can be improved step by step through instructors' guidance in the application of various task items and activities. LLSC enables 18 types of training items as illustrated in Table 1.

CTMS in Rofall allows EFL teachers to manage all aspects of teaching and learning. Teachers can arrange teaching content and activities to guide students in their learning process, collect data to construct or prescribe exercises, tests, and conduct surveys. It also enables instructors to comment directly on students' homework and tests separate from the automatically provided scores, and learners' feedback or comments can be collected. In a word, it helps EFL teachers to track learners' learning process.

---

[*] CET is the abbreviated form of "College English Test". The national College English Test Band Four (CET-4) in China aims to evaluate non-English majors' comprehensive language proficiency. Apart from CET-4, there is also CET-6, which is widely used to evaluate above-average students' language proficiency.

Table 1.   Types of training items

No.	Types of task items	No.	Types of task items
1.	Short Answer Questions	2.	Multiple Choices
3.	True or False (1)	4.	True or False (2)
5.	Spot Dictation	6.	Compound Dictation
7.	Sentence Dictation	8.	Sentence Completion
9.	Constructing Questions (1)	10.	Summary Writing
11.	Essay Writing	12.	Sentence Repeat
13.	Intonation Practice	14.	Constructing Questions (2)
15.	Question-Answer Exercise	16.	Role Play
17.	Personal Statement	18.	Group Discussion

The last one in the Rofall system, RMS enables the course designers to prepare multimedia resources, such as learning material selection, task item developing, processing, and editing.

2.3.   Features of the Rofall system
The system has the following features:
- Highly improved instruction and supervision in the language teaching and learning process through optimized sequencing in comparison to more general systems that are not optimized for language teaching and learning;
- Flexibility in changing teaching and learning activities. Easy updating of content and activities by various means like CD's, instructors' input, and network based general updates, etc.;
- Individualization: learners' portfolios are generated automatically, providing sophisticated scores of mastery for certain language components, as well as suggestions for further study through error analysis and feedback;
- High efficiency and validity – the system evaluates both objective and subjective items (apart from oral productive tasks) with a very high level of accuracy;
- Complete teaching and learning process: the system incorporates every single step of teaching and learning, including but not limited to information management, knowledge imparting, language teaching and learning activities, learning assessment, collaboration through exchange of learning experiences (learners' work display), and report management;
- Less dependence on stable Internet access – learning process will not be disrupted by Internet problems or low band-width connections, learners only need the Internet when downloading updates and uploading results;
- Different teaching techniques are used to make the teaching process more web-based and intelligent.

By using the system, classroom instructions are combined with online learning, allowing the instructor to select, combine, and sequence those tasks and activities for learners to hone their language skills, to thus create a more individualized teaching and autonomous learning process. This is so that "the computer- and classroom-based multimedia college English teaching model" requirements set by the government can be effectively supported, and teachers can not only manage every step in the language teaching and learning process, but also can motivate, supervise, and guide learners in real time through analysis of their performance, while learners can be empowered to have control over their own autonomous learning. Therefore, language teaching and learning processes become multimodal, individualized, measurable, and manageable in ways that were not possible in the past.

3. Applications of the system

The system was used in a five-week experimental teaching program in English grammar from November 24, 2008 to December 29, 2008. There were 286 students from 10 classes in total, of which 169 freshmen were from year 2008 and 117 sophomores from 2007. All of them were science and technology majors and were instructed by three different teachers. The result of using the system to develop students' ability to gain and refresh their English grammar knowledge shows to be very effective.

In 2009, the system was used again in a four-week program in grammar and vocabulary during the winter vacation. About 2800 freshmen and sophomores (they came from all areas of China) from 95 classes took part in the program. The test result was not valid since most students failed to do what they were told. There were two main reasons causing the problem, one was that a large number of the students had poor Internet connections at home, and the other was that the Chinese Spring Festival was on during the period so students were not highly motivated to accomplish such extra homework.

In October and December, 2009, a simulated test for CET-4 was conducted through the system. There were 100 sophomores from year 2008 and 50 freshmen from year 2009 who took part in the test and they were all non-English majors who were instructed by two different teachers. Performance of tests and grading were all done online.

From May 2010 till June 2010, the system was used for a four-week listening skill training program and pre- and post-simulated tests for CET-4. There were 2,358 students from 72 classes of year 2008 and they were all non-English majors instructed by 14 different teachers. The average score of the grade from the pre-simulated comprehension skills test was 54.9 while the average from the post-simulated test was 64.2, which implies that using the system to prepare students for taking the national CET-4 was very effective. Performance of tests and grading were all done online.

From 2009 to 2012, students taking the Audio-Video English Speaking Course (AVESC) all did their pre-test, mid-test, post-test, and a pre- and post-questionnaires

through the system. Data about their learning and responses to the various activities were collected as well. It shows that this ICT-based course has greatly promoted students' CLA, proven by the data collected from over 2,000 students for four rounds of teaching sessions, including that from pre- and post-test scores, comprehension surveys, and follow-up interviews. It has also been established that the use of the Rofall system has played a very important role in students' learning processes.

The number of registered students has now reached 16,000, which includes 60 students from another university.

4. Conclusions

It has been demonstrated that the teaching materials and the interactive communicative activities designed and developed with the system have a positive effect on improving students' CLA, especially their listening and speaking skills, and the system further promotes the idea of individualized teaching and autonomous learning, therefore offering valid pedagogical suggestions and implications for other EFL instructors and designers in CALL environments.

References

Bachman, L. F. (1990). *Fundamental considerations in language testing*. Oxford: Oxford University Press.

Bergasa-Suso, J., Sanders, D. A., & Tewkesbury, G. E. (2005). Intelligent browser-based systems to assist Internet users, *IEEE Transactions on Education, 48*, 580-585.

Department of Higher Education. (2007). *College English curriculum requirements*. Beijing: Foreign Language Teaching and Research Press.

Skinner, B. F. (1968). *The technology of teaching.* New York: Appleton-Century-Crofts.

Volman, M. (2005). A variety of roles for a new type of teacher educational technology and the teaching profession. *Teaching and Teacher Education, 21*(1), 15-31. doi: 10.1016/j.tate.2004.11.003

Wen, F. A., Zhang, J., & Tian, Y. F. (2009). Design and application of an E-learning platform for various learning groups. *International Conference on Network Infrastructure and Digital Content* (pp. 731-735). IEEE IC-NIDC2009.

CALL: Using, Learning, Knowing
EUROCALL Conference, Gothenburg, Sweden
22-25 August 2012, Proceedings
Edited by Linda Bradley and Sylvie Thouësny