An Empirical Study on University English Teacher's Roles in the Web-Based Autonomous Learning Environment*

Ling Zhang

Beijing Wuzi University, Beijing, China

Web-based language learning technologies have begun to play an increasingly important role in the teaching of foreign/second languages (L2). The university teachers' roles are shifting, teachers play a multiple roles to optimize the teaching effect, this paper is an empirical study on how teachers' role affect learner autonomy by choosing two non-English major classes and compare the learner autonomy data before and after the reform, the data are collected through questionnaire and analyzed by SPSS 15.0. The findings tell us that the non-English majors possess a low level of learner autonomy, but it is proved in the experiment that it is possible to improve the learning autonomous ability of non-English major students by changing the teachers' role from an authority to a facilitator or supervisor of the learning process. Students are positive to the change of teachers' role, and it shows in another way that teachers play a positive role in the process of fostering students' autonomy ability.

Keywords: web-based, teacher's role, autonomous learning

With the rapid development of information technology, computer-based English teaching is widely applied in college English autonomous learning. The latest ELT (English Language Teaching) theory emphasizes that teaching and learning is a process of the interaction between teachers and students, in this process, students play a key role instead of teachers. This is far different from the traditional teacher-centered language learning. And web-based language learning environment is a good way to change the traditional language learning method and then bring students into a new limitation-free language learning world with unlimited location and time. Therefore, the web-based college English learning system is adopted by more and more universities to establish an independent platform for students to learn English after class.

Literature Review

The Characteristics of Networked Multimedia-Assisted Teaching Environment

College English Curriculum Requirements of China (2007) demands that the colleges and universities in China should "extensively use the advanced information technology, develop and construct a variety of computer-based networked courses, provide students with good English learning environment and conditions", which affirms the necessity of the new multimedia-assisted language teaching model, requiring:

All colleges and universities should make full use of modern information technology, change the single teacher-oriented teaching mode by computer-based classroom teaching of English. On the basis of modern information

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Corresponding author: Ling Zhang, MA, senior lecturer, Beijing Wuzi University, Beijing, China; research field: technology-assisted language acquisition. E-mail: irene_zhangling@hotmail.com.

technology, especially network technology, the new teaching model makes the teaching and learning of English free of time and place constraints, developing toward the direction of personalization and self-learning.

The network-based foreign language teaching expands time and space of teaching. With the development of China's computer network technology and teaching software development, the network-based English teaching begins to perform its evident advantages and plays an important role in teaching. One of the significant advantages is that teachers can create a lively learning environment, improve teaching efficiency and teaching quality by using the internet and multimedia technology. Multimedia-based teaching integrates the technology of texts, graphics, images, animation, video, and audio, which increases sensory stimulation of students and makes the teaching figurative, three-dimensional and vivid, thereby increasing students' interest in learning. With the support of multimedia technology, teachers have transferred from pure explainers and conductors to take diverse roles.

Autonomous Learning

Class hours are far from enough for grasping a foreign language which needs constant practice to make it perfect. It is well-known by the foreign/second languages (L2) teachers that teaching learners how to learn, learner autonomy and learner independence have significantly influenced EFL (English as a Foreign Language) language education. There are numerous definitions of autonomy and other synonyms for it in relevant literature, such as "independence" (Sheerin, 1991), "language awareness". Here we consider learner autonomy and learner independence in language teaching that are synonyms or used interchangeably (Pinkman, 2005).

In the late 1970s, in a report that Holec (1981) was commissioned to write for the Council of Europe, he defined autonomy as "the ability to take charge of one's learning" (Holec, 1981). He highlighted that learners have to work within a learning structure which enables them to exercise their ability to take control of their learning. According to Holec, to take charge of one's learning means to be responsible for all the decisions related to the learning process. Similar opinions were developed by Little (1991), as learner autonomy is a "capacity for detachment critical reflection, decision making, and independent action". And according to Hsu (2005), independent learners are better able to understand what is being taught, achieve learning objectives, monitor their own learning, and use appropriate learning strategies. In light of these findings, "independence" and "autonomy" imply that students take a greater degree of control over the content and methods of learning than is usual in classroom language learning contexts and to develop their integrated language skills.

These definitions of independent learning seem to cut the teacher's role from web-based language learning. At the web-based learning first introduced in Chinese universities, teachers' role is questioned under this new mode of language learning process. Some addressed that, with the help of information technology and computer, teachers are unnecessary in the autonomous learning process. Some even considered that the laboratory workers can play the role of supervisor instead of teachers. All these misunderstandings sourced from the conflicts between the deep-rooted traditional teacher-centered teaching method and the new mode of student-centered teaching method. Does web-based language learning really means learning without teachers?

Little (1990) argued, autonomy is not a synonym for self-instruction... autonomy is not limited to learning without a teacher (Little, 1990, p. 70). He highlighted the importance of a counsellor in providing individual tutorials for guidance and encouragement in the process of moving from dependence to independence is also well-documented by Pinkman (2005).

While when it comes to the deeper connotation of “independent learning”, Little (1991) opened another door as he put emphasis on the notion of cooperating with others as a socially responsible person. This definitions show mainly on the result of independence as cooperation while others may put more attention on the results of independent as being alone. So this defines “independent learning” as social activity rather than individual.

The researchers argue that the university teachers need to reposition themselves to promote the learner autonomy under the web-based environment. But the relevant empirical studies are rare to find especially the non-English major ones. By realizing this, the author designed her research questions as follows:

- (1) What are the current situations of the learner autonomy of the non-English major students?
- (2) What are the teachers' roles in facilitating the learner autonomy in web-based learning environment?

Methodology

In this study, two classes of 25 students each were chosen, the two classes are from business school and they were taught by one college English teacher. They have college English class twice a week with two hours each time, and the study lasted for two terms. At the beginning of the study, before the experiment, a questionnaire was designed to analyze the current situation of the learner autonomy of the students. The questionnaire has 24 questions, it examines the following aspects: autonomy awareness, learning attitude, learning goals, planning, learning strategy, and learning outcome and evaluation. The answers are scaled by 1-5 numbers, completely disagreed are 1 and completely agreed are 5, so the highest score means the one with highest learner autonomy. And the scores are analyzed by SPSS 15.0.

Table 1 tells that Sig is high (> 0.05), this is a sign that the two classes in the empirical study are almost the same in the beginning of the experiment, there are no obvious differences between these two. Table 2 shows that students from both of the classes are low in learner autonomy.

Table 1

Questionnaire T-Test of Two Classes

Question	Pair sample t test	Question	Pair t test	Question	Pair t test	Question	Pair t test
Item 1	0.096	Item 7	0.615	Item 13	0.727	Item 19	0.150
	0.097		0.615		0.727		0.150
Item 2	0.478	Item 8	0.214	Item 14	0.540	Item 20	0.445
	0.478		0.214		0.540		0.445
Item 3	0.065	Item 9	0.177	Item 15	0.411	Item 21	0.155
	0.065		0.177		0.412		0.155
Item 4	0.213	Item 10	0.872	Item 16	0.532	Item 22	0.873
	0.213		0.872		0.532		0.873
Item 5	0.098	Item 11	0.061	Item 17	0.098	Item 23	0.074
	0.098		0.061		0.098		0.074
Item 6	0.774	Item 12	0.150	Item 18	0.867	Item 24	0.615
	0.774		0.150		0.867		0.615

After analyzing the learning autonomy situation of the two classes, the author chose one class randomly as the experimental class and the other one as the control class. In the experimental class, the teacher applied the student-centered and teacher-assisted teaching method and the control class continues the traditional teaching method.

During the experiment, the teacher applied the student-centered method to facilitate the learner autonomy in the following ways:

- (1) Help students cultivate the learning autonomy awareness;
- (2) Facilitate the positive environment in class;
- (3) Guide the students design their own feasible learning plan and learning goals;
- (4) Introduce the effective learning strategy;
- (5) Help students monitor their learning process;
- (6) Help students evaluate their learning outcome.

Table 2

SD and avg of Each Question on the Questionnaire

Ques	C	avg	SD.	Ques	C	avg	SD.	Ques	C	avg	SD.	Ques	C	avg	SD.
Item 1	1	3.38	0.673	Item 7	1	2.56	0.734	Item 13	1	2.57	0.765	Item 19	1	2.86	0.778
	2	3.65	1.001		2	2.45	0.713		2	2.47	0.767		2	2.87	0.811
Item 2	1	2.98	0.876	Item 8	1	2.34	0.546	Item 14	1	2.18	0.623	Item 20	1	2.83	0.812
	2	2.71	0.844		2	2.43	0.654		2	2.25	0.654		2	2.76	0.821
Item 3	1	2.05	0.565	Item 9	1	2.45	0.677	Item 15	1	2.67	0.734	Item 21	1	2.98	0.798
	2	2.21	0.534		2	2.56	0.712		2	2.87	0.767		2	2.65	0.767
Item 4	1	2.32	0.674	Item 10	1	2.56	0.714	Item 16	1	2.53	0.765	Item 22	1	2.63	0.720
	2	2.34	0.654		2	2.44	0.723		2	2.65	0.786		2	2.65	0.723
Item 5	1	2.86	0.852	Item 11	1	2.33	0.626	Item 17	1	2.34	0.675	Item 23	1	2.14	0.654
	2	2.77	0.837		2	2.43	0.674		2	2.34	0.734		2	2.22	0.678
Item 6	1	2.78	0.774	Item 12	1	2.48	0.723	Item 18	1	2.76	0.798	Item 24	1	2.61	0.733
	2	2.76	0.736		2	2.79	0.732		2	2.98	0.810		2	2.72	0.754

Notes. "C" stands for class; "avg" stands for average.

Discussion of Findings

Data Analysis

During the two-term experiment, the teachers applied the autonomy-built strategy in the experiments class. The students in both classes are examined by the same questionnaire to compare the two results to see how teacher contributes to facilitate the learner autonomy. We can easily tell from the data that both classes are improved in terms of learner autonomy, but Table 4 shows that experimental class is improved much greater than control class.

From Table 3, the paired sample t test is much lower than 0.05, it shows that there are great differences between the data from pre-test and post-test of the experimental class. This is an evidence that the experiment implemented on the experimental class are effective in facilitating the learner autonomy, and teacher plays an extremely important role in improving the learner autonomy ability. From Table 4, the paired sample t test is higher than 0.05, it shows that there are no great differences between the data from pre-test and post-test of the control class.

The experiment data answered the research questions, the current learning autonomy ability of the non-English major students is low. And teachers play an extremely important role in facilitating and improving the learner autonomy. The experiment paralleled with other empirical studies done by the L2 acquisition researchers to prove that teachers have great effect on promoting learner autonomy. The same result from

similar experiment shows the importance of teachers and it raised the bar for the university English teachers to find a way to cultivate the learner autonomy ability, and to further realize the pre-set learning goal.

Table 3

Experimental Class Paired Sample T Test

Pre-test and post-test		T test	Pre-test and post-test		T test	Pre-test and post-test		T test
Pair 1	Item 1a-Item 1b	0.000	Pair 9	Item 9a-Item 9b	0.000	Pair 17	Item 17a-Item 17b	0.000
Pair 2	Item 2a-Item 2b	0.000	Pair 10	Item 10a-Item 10b	0.000	Pair 18	Item 18a-Item 18b	0.000
Pair 3	Item 3a-Item 3b	0.000	Pair 11	Item 11a-Item 11b	0.000	Pair 19	Item 19a-Item 19b	0.000
Pair 4	Item 4a-Item 4b	0.000	Pair 12	Item 12a-Item 12b	0.000	Pair 20	Item 20a-Item 20b	0.000
Pair 5	Item 5a-Item 5b	0.000	Pair 13	Item 13a-Item 13b	0.000	Pair 21	Item 21a-Item 21b	0.000
Pair 6	Item 6a-Item 6b	0.000	Pair 14	Item 14a-Item 14b	0.000	Pair 22	Item 22a-Item 22b	0.000
Pair 7	Item 7a-Item 7b	0.000	Pair 15	Item 15a-Item 15b	0.000	Pair 23	Item 23a-Item 23b	0.000
Pair 8	Item 8a-Item 8b	0.000	Pair 16	Item 16a-Item 16b	0.000	Pair 24	Item 24a-Item 24b	0.000

Table 4

Control Class Paired Sample T Test

Pre-test and post-test		T test	Pre-test and post-test		T test	Pre-test and post-test		T test
Pair 1	Item 1a-Item 1b	0.725	Pair 9	Item 9a-Item 9b	1.000	Pair 17	Item 17a-Item 17b	0.234
Pair 2	Item 2a-Item 2b	0.056	Pair 10	Item 10a-Item 10b	0.262	Pair 18	Item 18a-Item 18b	0.435
Pair 3	Item 3a-Item 3b	0.431	Pair 11	Item 11a-Item 11b	0.342	Pair 19	Item 19a-Item 19b	0.675
Pair 4	Item 4a-Item 4b	0.345	Pair 12	Item 12a-Item 12b	0.323	Pair 20	Item 20a-Item 20b	0.098
Pair 5	Item 5a-Item 5b	0.489	Pair 13	Item 13a-Item 13b	0.660	Pair 21	Item 21a-Item 21b	0.057
Pair 6	Item 6a-Item 6b	0.578	Pair 14	Item 14a-Item 14b	0.123	Pair 22	Item 22a-Item 22b	0.133
Pair 7	Item 7a-Item 7b	0.467	Pair 15	Item 15a-Item 15b	0.678	Pair 23	Item 23a-Item 23b	0.456
Pair 8	Item 8a-Item 8b	0.894	Pair 16	Item 16a-Item 16b	0.654	Pair 24	Item 24a-Item 24b	0.675

Notes. "Pre-test and post-test" stands for pairs from two questionnaires (pre-test and post-test); "t test" stands for paired sample t test.

Roles of College English Teachers in the Networked Multimedia Independent Learning Environment

From the experiment results, we can summarize the roles of college English teachers meet the new mode language teaching, on the other hand, with the rich learning materials online, students are more and more teacher-independent. Therefore, web-based language learning is a trend for L2 acquisition. Though L2 teaching has benefited a lot from the multimedia technology, but to make the technology provide students with truly effective guidance and help, teachers should re-examine their own roles and positions. The roles of university English teachers are concluded as follows:

Facilitators. Any students come into contact with multimedia teaching with high enthusiasm, but after a period of time, there is a big gap between their expectations and the actual learning, then they will lose their enthusiasm for study. Thus, English teachers' professional knowledge and experience can help students to take the proper learning attitude and help students master the learning skills to understand the characteristics and rules of English learning, enable them to better practice independent learning.

Organizers and designers. In the multimedia-assisted teaching model, teachers bear the tasks of classroom activities arrangement and assist in organizing extra-curricular interactive collaboration. Teachers should introduce the specific procedures of the tasks to students, clarify the significance of activities for English learning. The students should be clear about their responsibilities before taking the tasks. In terms of the extra-curricular learning activities for students, teachers should take the responsibility to help them to carry

out the activities through various channels and platforms. At the same time, teachers also assume the coordinative responsibility. When students encounter difficult problems, teachers should be actively involved as a middleman, actively participate in the problem resolution.

Supervisors. To guarantee a good learning outcome, teachers need to be the supervisor in the whole learning process. Though the supervision goes through the whole learning process, it does not mean to check every move of students, but to check their schedule and learning outcome. Teachers can stay in the backstage of the web-based learning platform to make student-specified learning plan and supervise them to follow the plan. In this new teaching mode, teachers supervise students to finish their own learning tasks which are different from their English proficiency. This offsets the weakness from offering every student the same knowledge. The regular checking of learning records, exercises, learning schedule, examining the learning hours offer teachers a clear and complete picture of the learning outcome of students. Under the supervision, students are more promoted to finish their tasks on time with high quality.

Evaluators. In the multimedia-assisted teaching model, students have large freedom for autonomous learning, then the learning content is varied and comprehensive, therefore the teacher should pay more attention to the students' learning process and learning content, help students develop initiative, enable them to study English under the supervision of the teachers, make regular check and assessment of students' English learning. The correct assessment of students' self-learning can ensure the teachers to continue the next step of the specific English teaching. So teachers should make researches on the evaluation and assessment to find more effective ways and means.

Controller. Under the internet and information language learning circumstances, the students face a world full of various information and only part of them is useful for language learning. The ability of screening and selecting information vary from student to students. Some students may be easily misled by the unuseful or even unrelated information, and that is why teachers need to perform their role as controller to manage and supervise the information screening and lead the misleading information searching back on track. Researches show that in the college English exercises, when students are asked to collect some information around on specific topic, some information are Chinese, some are not related to the topic. Students sometimes are asked to make their computer-based conversation in English online, students with less self-discipline ability would like to make conversation in Chinese. All these situations tell that without the control from teachers, the online autonomous learning can never achieve the desired outcome.

Conclusions

Teachers play an irreplaceable role in L2 acquisition, especially in the web-based learning environment. The new multimedia-assisted teaching is not teacher-oriented, teachers play the roles of guide and facilitator, organizer, participant, tester and assessor, etc., which on the other hand, can never take the centered role of students. Then English teachers can make full use of multimedia technology to create a language environment for students and facilitate the positive environment in class, guide the students design their own feasible learning plan and learning goals, introduce the effective learning strategy to help students monitor their learning process and design the evaluation system to help students evaluate their learning outcome.

The experiment proved that it is possible to improve the learning autonomous ability of non-English major students. But we need to realize that we are still in the transmission period from traditional way to student-centered way. The transmission of teachers' role is, in another way, a new challenge to the teachers,

that is to say, they need to acquire the new ability of computer and internet to operate computers smoothly in the web-based autonomous learning process to make full use of information system to cater language learning needs. At the same time, teachers need to rise their bar of knowledge level to meet all the possible inquiries from students since they can come across all kinds of information online. These are the whole new level of requirements to teachers, they have to meet greater challenges in the multimedia teaching and be more active than in the traditional teaching and play multiple roles to adapt to the demands of modern college English teachers in the new technology era.

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