

Research on the Teaching Model of College English Autonomous Learning in the Environment of Internet

Nan Chen

Foreign Language Department, Qingdao University of Science and Technology, Qingdao, China

Abstract—With the deep application of Internet in the field of college English reform, a new teaching model of college English autonomous learning in the Internet is applied in this study. The new teaching model emphasizes the application of cognitive strategy and monitoring strategy when the English autonomous learning is conducted online and offline. The different notions and different performances of students between new teaching model and traditional model are discussed in this paper.

Index Terms—autonomous learning, internet, cognitive strategy, monitoring strategy

I. INTRODUCTION

This paper aims to investigate the teaching model of college English autonomous learning in the environment of Internet at Qingdao University of Science and Technology (hereinafter referred to as QUST). The College English Curriculum Requirements, the Ministry of Education (2007) points out that, “one of the objective of college English is to enhance their ability to study autonomously”. The Internet Development Research Department of China Internet Network Information Center (CNNIC) releases the latest Internet survey which shows more than 95% Chinese college students are Internet users. The Internet provides a personalized teaching environment in the teaching of English autonomous learning, and the traditional English teaching does not have such kind of advantage. Based on the investigator’s teaching experience, this paper proposes building a teaching model of college English autonomous learning in the environment of Internet—“2+2” Model. In this model, the former 2 represents the combination of college English learning online and offline. The online college English autonomous learning is based on Internet environment. The offline college English learning refers to the teaching practice in the class. The latter 2 represents the application of cognitive strategy and monitoring strategy in the process of autonomous learning, which can improve the college student’s autonomous learning efficiency and reduce the blindness of Internet autonomous learning.

2015 is the crucial year of college English teaching and learning reform in QUST, where the one-year training program of college English teaching and learning to 2015 non-English majors will be carried out. The implementation of 2015 one-year training program is totally different from the previous two-year training scheme, which proposes the new demands for the teachers and the students. The changes of teaching principles, the innovation of teaching model and the accompanying challenges and opportunities are the motivation and source of college English staff’s qualitative variation. The present study attempts to give answers to the following questions: During the implementation of the new training program, what are the students’ notions regarding the combination of autonomous learning online and offline? And what is the students’ real performance under the “2+2” teaching model and the traditional teaching model?

II. LITERATURE REVIEW

A. *The Research of Autonomous Learning*

Educationists propose “autonomous learning” in the 20th century. The concept, theory and practice of autonomous learning developed in the field of western foreign language teaching, which is the product of comprehensive research results of psychology, pedagogy and language teaching. Many researchers study and define “autonomous learning” from different perspectives. Henri Holec (1981, p.45-48) formally puts forward “autonomous learning” in the early 1980s. Holec defines the autonomous learning as “the ability to take charge of one’s own learning.” The proposal of this definition arouses great attention and heated discussion in the western language world. Therefore, many relevant nouns of autonomous learning appear, such as autonomous learning, learner autonomy, self-access learning, independent learning, self-directed learning, self-study and so on. For Holec, autonomous learning is an ability, not an action. He pointed out that the ability was “a potential capacity to act in a given situation, and was not the actual behavior of an individual in that situation. This ability is not inherent and people would get the ability through the natural way or systematic study.”(1981, p.45-48) The key of Holec’s definition is to regard autonomy as an attribute of the learner, rather than the learning situation.

In terms of “autonomy”, different scholars from foreign countries hold different opinions and understandings. Some

scholar believes that “autonomy” is a learning process, in which learners need to practice actively and be responsible for their own study. They determine their study objectives, make study plans, monitor their learning process and evaluate the learning outcomes according to their learning needs and existing knowledge. While some scholar considers that “autonomy” is a kind of learning ability, which emphasizes the characteristics of learners rather than learning process.

Pang Weiguo’s (2003) research shows that autonomous learning originates from the Qing Dynasty, and the research on theory and practice of autonomous learning has a very long history in Chinese academic world. Accordingly, there are three main stages:

- the stage of proposing autonomous learning (before 1920)
- the initial experimental stage of autonomous learning (from the 1920s to 1970s)
- the systematic research stage of autonomous learning (from the 1980s to now)

Since 1990s, the study of learner autonomy has become a hot spot in the field of foreign language teaching in China. Over the past 10 years, the research has achieved remarkable results. After 2004, the research on autonomous learning has been heating up in China. In the review of research venation of autonomous learning in China, the related studies mainly focus on the following aspects:

- research on the concept and connotation of autonomous learning
- research on influence factors of autonomous learning
- research on types of autonomous learning
- research on ability of autonomous learning
- research on promoting learner autonomy
- research on the evaluation system of autonomous learning
- research on the teachers’ role under the multimedia context
- research on the developing stages of autonomous learning

B. *The Research of Cognitive Strategy*

In the 1990s, O’Malley and Chamot put forward cognitive strategy according to information processing theory. They believe “cognitive strategies manipulate directly on incoming information, operating it in ways that enlarge learning.”(1990, p.44) Altogether O’Malley and Chamot sum up 16 cognitive strategies: repetition, resourcing, directed physical response, translation, grouping, note-taking, deduction, recombination, imagery, auditory representation, key word, contextualization, elaboration, transfer, inference and summarizing. The classification of cognitive strategies by O’Malley and Chamot has been widely used.

Wen Qiufang (1996a), a researcher on learning strategies in China, assumes that the system of English learning strategies includes two parts: management strategies and language learning strategies. The two parts influence each other and interact each other. She recognizes language learning strategies as traditional learning strategies and non-traditional learning strategies. In traditional learning strategies, there are using-mother tongue strategies, accuracy strategies and form-focused strategies. In non-traditional learning strategies, there are mother-tongue-avoidance strategies, fluency strategies and meaning-focused strategies.

In teaching practice, the English teachers design their own cognitive strategy framework and guide the training of cognitive strategy in the light of their students’ practice and teaching materials.

C. *The Research of Monitoring Strategy*

In the 1970s, American developmental psychologist Flavell put forward the concept of metacognitive strategy. Flavell believes that metacognition refers to the knowledge and awareness of the subjects’ cognitive process. It includes three factors: the metacognitive knowledge, the metacognitive experience and the metacognitive monitoring. Metacognitive knowledge is the understanding towards the factors that affect the cognitive processes and results, and the understanding of ways and influence; Metacognitive experience is the cognitive experience and emotional experience of the subject in the metacognitive activities; Metacognitive monitoring is the evaluating and adjusting process of cognitive activities by using metacognitive knowledge, which is based on the strength of metacognitive experience. In the actual cognitive activities, the three factors are interrelated and interact with each other. Monitoring strategy is considered to be important and necessary to the metacognition.

The implementation of monitoring strategy in learning can promote the development of metacognitive strategy. The monitoring strategies can be divided into external monitoring and self-monitoring according to the monitoring subject and the monitoring object. The Study Theory of Constructivism stresses the importance of learners’ subjective positions and it makes the learners have high autonomy. At the same time, teachers’ control and regulation can not be neglected. Therefore, in the college English autonomous learning under the environment of Internet, external monitoring and self-monitoring coexist and combine organically. Self-monitoring is the center, while the external monitoring is the guarantee. With the increase of learners’ studying experience, studying skills, and studying strategies, the guidance and monitoring of external environment is reduced gradually, and the learners’ self-monitoring strategy and the autonomous learning ability can be improved ultimately.

III. RESEARCH METHODS

A. Research Question and Subjects

The purpose of this study was to investigate the “2+2” teaching model of college English autonomous learning in the environment of Internet. The research questions of the study attempted to explore were as follows: During the implementation of the new training program, what are the students’ notions regarding the combination of autonomous learning online and offline? What is the students’ real performance under the “2+2” teaching model and the traditional teaching model?

135 students from QUST took part in the questionnaire survey and they were 86 girls and 49 boys. They were all 2015 freshmen from four classes. Two classes of them were assigned as the experimental classes, and they were considered as Group1. They were taught under “2+2” teaching model with the help of Internet. In the experimental classes, teachers strengthened online-offline interaction and the strategy guidance. In the two control classes that were considered as Group 2, students were taught traditionally. The questionnaires were collected at the end of the one-year college English learning.

B. Research Instruments

Questionnaire was used to collect the data for this study. The researcher designed the questionnaire by herself based on the metacognitive strategies questionnaires of Bachman et al (1993). The questionnaire consists of three parts with 21 items. The first 6 items of Part A are related to the students’ notions regarding the combination of autonomous learning online and offline. The next 6 items of Part B are related to cognitive strategies of students’ autonomous learning. The last 9 items of Part C concern the monitoring strategies.

Statistical Package for the Social Science (SPSS) for window version 17.0 and Excel 2013 were employed to analyze the data.

IV. RESULTS AND DISCUSSION

A. Students’ Notions Regarding the Online-offline Autonomous Learning

TABLE I
REPOSSES TO ITEMS ON ONLINE-OFFLINE AUTONOMOUS LEARNING

Item	Frequency%					
	Group	5	4	3	2	1
A1 I enjoy English autonomous learning online.	Group1	21	36.8	22.8	3.5	1.8
	Group2	11.5	33.6	36.9	15.4	2.5
A2 I learn English through Internet in order to complete the assignment.	Group1	10.5	30.6	19.3	32.6	7
	Group2	5.5	35.9	29.5	25.2	3.8
A3 I am interested in abundant website resources matched the courses.	Group1	22.8	38.6	19.3	12.3	7
	Group2	14.1	38.5	24.4	21.8	1.2
A4 I finish the assignment actively in network learning.	Group1	21	35.1	29.8	8.8	5.2
	Group2	5.1	35.9	44.8	10.2	3.8
A5 I am attracted by other information online and stop learning.	Group1	24.6	36.8	29.8	7	1.8
	Group2	17.9	37.2	26.9	22.8	1.2
A6 My learning efficiency is improved through the autonomous learning online.	Group1	17.5	21	52.6	5.2	1.8
	Group2	7.7	29.5	48.7	14.1	0

(5-strongly agree 4-agree 3-no views 2-disagree 1-strongly disagree)

Table I showed the students’ responses to items on the combination of autonomous learning online and offline. As shown, nearly half of the students’ in Group 2 enjoyed English autonomous learning online while the number in Group 1 was 57.9%. The data indicated the students in Group 1 were more in favor of the autonomous learning. Item A2 and Item A4 were employed to investigate the learning autonomy of the students online. As for Item A2, 41.1% of the students in Group 1 and 41.4% of the students in Group 2 expressed that they had learned college English online just in order to complete the assignment. The data were almost same. However, 39.6% of the students of Group 1 showed disagreement on this statement, which was ten percentages higher than the number of Group 2. As for Item A4, 56% of the students in Group 1 expressed that they could finish the assignment actively in network learning, while the number in Group 2 was 41%. Therefore, the autonomy of the students in Group 1 was stronger than that of students in Group 2. 61.4% of the students in Group 1 were interested in abundant website resources matched the courses, and the data of Group 2 was only 52.6%. In respect of Item A5, 61.4% of Group 1 would be interrupted because of the attraction of other information. The number was bigger than that of Group 2, which indicated that the students in the experimental classes needed more supervision when they did autonomous learning online. The last item of Part A reflected the efficiency of the autonomous learning under the environment of Internet. The views of two-group students on this item were quite similar. The numbers were 38.6% and 37.2% respectively. During the following interview, one student said, “I want to pass the CET Band-4 in the first year, so the knowledge of our text book is not enough. I can get various kinds of English knowledge from the Internet. For example, I often surf the “Putclub” website to obtain the latest VOA Special English listening materials, which is very helpful to improve my listening. But I always spent a little time on chatting or playing computer games when I was online.” In conclusion, teacher should achieve the teaching classroom’s expansion by using the Internet, enhance students’ autonomous learning ability, form the effective autonomous learning

strategies, lead students to achieve self-monitoring effectively and overcome their dependent psychology finally.

B. Views on Cognitive Strategies

TABLE II
RESPONSES TO ITEMS ON COGNITIVE STRATEGIES

Item	Frequency%					
	Group	5	4	3	2	1
B1 I can look up new words by using dictionary or smartphone, and read them again and again.	Group1	38.6	40.4	10.5	5.2	5.2
	Group2	29.5	40	20.5	10.3	0
B2 I can associate the words with its pronunciation or image.	Group1	24.4	36.8	22.8	10.5	7
	Group2	23	38.5	21.8	14.1	2.6
B3 I can translate the difficult sentences into Chinese in order to understand.	Group1	37.2	46.2	10.3	3.8	2.6
	Group2	35	42	15.8	5.3	1.8
B4 I can guess the meaning of new words according to the context relations.	Group1	43.6	37.2	12.8	5.1	1.3
	Group2	28	40.4	21	8.8	1.8
B5 I can take notes while I listen the passages.	Group1	8.8	15.8	35	24.6	15.8
	Group2	10.3	14.1	47.4	21.8	6.4
B6 I can summarize the English knowledge I learned in my mind.	Group1	10.5	21	33.3	24.6	10.5
	Group2	2.6	20.5	50	19.2	7.7

(5-strongly agree 4-agree 3-no views 2-disagree 1-strongly disagree)

As mentioned earlier, O'Malley and Chamot had summed up 16 cognitive strategies, among which 7 strategies were selected in this study. The 6 items were used to investigate the repetition strategy, resourcing strategy, imagery strategy, translation strategy, contextualization strategy, note-taking strategy and summarizing strategy of the students in two groups.

According to Table II, students in Group 1 got higher scores than the students in Group 2 on Item B1, Item B3, Item B4, Item B5 and Item B6. It indicated the students who were taught under the "2+2" teaching model used repetition strategy, translation strategy, contextualization strategy, note-taking strategy and summarizing strategy much more frequently. As for Item B2 that was used to investigate the imagery strategy, the scores of two groups were alike, and they were 60% and 62% respectively. In the light of above data, students in Group 1 did better on the application of cognitive strategies, yet both groups of the students obtained lower scores on note-taking strategy. Therefore, teachers should strengthen the training of those two strategies during teaching process.

C. Views on Monitoring Strategies

TABLE III
RESPONSES TO ITEMS ON MONITORING STRATEGIES

Item	Frequency%					
	Group	5	4	3	2	1
C1 I read the questions carefully when I do reading comprehension, and predict the content or the theme of the passage.	Group1	31.1	45.6	18.1	5.2	0
	Group2	23.1	43.6	19.2	11.5	2.6
C2 I can limit the reading time and finish the reading effectively.	Group1	7	19.3	45.6	22.8	5.3
	Group2	5.1	19.2	42.3	28.2	5.1
C3 I think my spoken English is fluent.	Group1	5.2	17.5	33.3	26.3	17.5
	Group2	5.1	9	26.9	26.9	32.1
C4 I improve the studying methods of English constantly.	Group1	10.5	36.8	29.8	17.5	5.3
	Group2	6.4	34.6	30.8	25.6	2.6
C5 I ask myself whether I study the new knowledge seriously.	Group1	12.2	35.1	37.1	15.3	5.3
	Group2	9	41	31.5	11.4	1.1
C6 After class, I review the knowledge regularly.	Group1	8.8	15.8	42.1	28.1	5.2
	Group2	2.6	19.2	47.4	27	3.8
C7 I would finish the studying plan on schedule.	Group1	10.5	17.5	43.9	22.8	5.3
	Group2	2.6	23	42.3	26.9	5.2
C8 when I listen English, I realize that something I can't understand.	Group1	31	48.7	23	10.5	3.8
	Group2	33.3	33.3	9	8.7	1.7
C9 when I speak English, I know I make grammar mistakes sometimes.	Group1	28	56	8.8	1.8	5.4
	Group2	43.6	38.5	9	5.1	3.8

(5-strongly agree 4-agree 3-no views 2-disagree 1-strongly disagree)

All the items of Part C were employed to investigate the monitoring strategies of both group students. The comprehension monitoring had been properly investigated by Item C1 and Item C2. Students in Group 1 showed better performance on the two items, the numbers were 77% to 67% and 26.3% to 24.4%. Most of the students of both groups would read questions carefully when they did reading comprehension and predict the content or theme of the passage. But the efficiency of their reading was low, only about 25% of the students could finish the reading in limited time. In the following interview, some students told the investigator that they couldn't complete the previous CET-4 within the time prescribed. In order to improve the reading efficiency, students could enlarge their vocabulary, train reading skills

and teachers should pay more attention to the reading guidance. Item C3 was related to production monitoring. As the table showed, this strategy was applied better by the students in Group 1. However, only 22.8% of Group 1 and 14.1% of Group 2 believed that when they had said something sounded like native speaker. Chinese students were always trained to attach more importance to writing than speaking. 47.4% of the students in Group 1 had conceived the strategy monitoring, and they improved the studying methods constantly, while the number of Group 2 was 41%. Item C5 concerned the double-check monitoring. The data of both groups were similar. About half of the whole students would focus on what they were studying. As referred to Item C6 and Item C7, both groups of the students had got low statistics. Only 24.6% of the students in Group 1 would make revision regularly after class, while the number in Group 2 was 21.8%. 28.1% of Group 1 would finish the studying plan on schedule, while the number in Group 2 was 25.6%. The above-mentioned data conveyed that the plan monitoring was not realized enough for the students. Nevertheless, it was delightful that most of the students have concerned the problem identification. Nearly 80% of the students in Group 1 knew something they couldn't understand when they listened to English, and the number in group 2 was 67%. 84.2% of Group 1 realized they could make grammar mistakes sometimes when they spoke English, and the number of Group 2 was 82%.

In conclusion, the students in Group 1 showed much better performance on monitoring strategies accordingly. They had benefited more from the "2+2" teaching model. As far as the plan monitoring was concerned, teachers should help them to make the practical and progressive studying plans.

V. CONCLUSION

The purpose of this paper was to investigate the teaching model of college English autonomous learning in the environment of Internet. A survey was conducted for two-group students in QUST. By analyzing the data above, we obtained the following conclusion: First of all, students' autonomy and studying efficiency in QUST remained to be raised to a higher level. In the new teaching model under the environment of Internet, students were the center of learning, while teachers should act as the organizer, supervisor, facilitator and controller of English autonomous learning. All in all, the Internet was a double-edged sword, which provided the excellent support for autonomous learning, yet put forward higher demand to college English learners' autonomy. Secondly, students who were taught under the new teaching model for one year showed better performance by using cognitive strategies and monitoring strategies. Especially, they were good at using the repetition strategy, translation strategy, contextualization strategy, comprehension strategy, comprehension monitoring, and problem identification monitoring. It indicated that the one-year autonomous learning training under environment of Internet was effective. The "2+2" model enables teachers to achieve the classroom extension by using Internet, which can also improve college students' autonomous learning abilities, form effective autonomous learning strategies, achieve self-monitoring by being given effective guidance and overcome their dependence mentality. However, one-year research time was limited, whether the new teaching model had a more significant effect needed a further investigation.

APPENDIX

This questionnaire is being conducted for the study on the teaching model of college English autonomous learning in the environment of Internet. The objective of this questionnaire is to map the notions regarding the combination of autonomous learning online and offline, and the application of students on cognitive strategy and monitoring strategy of autonomous learning.

1. Sex: (please tick) Female Male
2. Age: _____
3. Major: _____

Read the following items and tick according to the actual situation.	strongly agree	agree	no views	disagree	strongly disagree
A1 I enjoy English autonomous learning online.					
A2 I learn English through Internet in order to complete the assignment.					
A3 I am interested in abundant website resources matched the courses.					
A4 I finish the assignment actively in network learning.					
A5 I am attracted by other information online and stop learning.					
A6 My learning efficiency is improved through the autonomous learning online.					
B1 I can look up new words by using dictionary or smartphone, and read them again and again					
B2 I can associate the words with its pronunciation or image.					
B3 I can translate the difficult sentences into Chinese in order to understand.					
B4 I can guess the meaning of new words according to the context relations.					
B5 I can take notes while I listen the passages.					
B6 I can summarize the English knowledge I learned in my mind.					
C1 I read the questions carefully when I do reading comprehension, and predict the content or the theme of the passage.					
C2 I can limit the reading time and finish the reading effectively.					
C3 I think my spoken English is fluent.					
C4 I improve the studying methods of English constantly.					
C5 I ask myself whether I study the new knowledge seriously.					
C6 After class, I review the knowledge regularly.					
C7 I would finish the studying plan on schedule.					
C8 when I listen to English, I realize that something I can't understand.					
C9 when I speak English, I know I make grammar mistakes sometimes.					

REFERENCES

- [1] Gao, Jili. (2006). Review and Expectation of Domestic Research on Learner Autonomy. *Foreign Language Teaching Abroad*, 2006(2), 54-58.
- [2] He, Xiaodong. (2004). Problem in Autonomous English Learning Research in China. *Foreign Language World*, 4, 10-14.
- [3] Higher School University Foreign Language Education Committee, (2007). *College English Curriculum Requirement*. Shanghai: Shanghai Foreign Language Education Press.
- [4] Holec, H. (1981). *Autonomy in Foreign Language Learning*. Oxford, UK: Pergamon Press, 1981:45-48.
- [5] O'Malley, J.M.&Chamot, A. U. (1991). *Learning Strategies in Second Language Acquisition*. Cambridge, UK: Cambridge University Press.
- [6] Pang, Guowei. (2003). *Self-regulated Learning—Principles and Educational Applications*. Shanghai: East China Normal University Press, 2003, 147-154.
- [7] Wen, Qiufang. (1996). Relations between Traditional or Non-traditional Language Learning Approaches and English Scores. *Modern Foreign Languages*, 1996(1), 37-43.
- [8] Xu, Jinfen &Zhan, Xiaohai. (2004). Review of Research on Learner Autonomy at Home and Abroad. *Foreign Language World*, 4, 2-9.

Nan Chen was born in Dalian, Liaoning, China in 1981. She received her MA degree in Applied Linguistics from Dalian Maritime University in 2007. She is currently a lecturer in the Foreign Language Department, Qingdao University of Science and Technology, Qingdao, China. Her academic research mainly focuses on applied linguistics and L2 teaching.