Blended Learning in English Instruction---A Case Study of English Department in NCEPU

Guo Zhe

Department of Foreign Languages of North China Electric Power University, Baoding of Hebei Province in China
aggiet79[at]163[dot]com

Abstract- Blended learning, which is proved to have a promising future, has incomparable advantages in learning and teaching practice. Taking English Department of North China Electric Power University as a case, the status quo of blended learning in college English learning and teaching has been investigated by adopting questionnaires and interviews. The results show that although both students and teachers have rigid demand for blended learning, the satisfactory degree is low. Implications and suggestions are further given to make improvement in terms of multimedia application, teachers, students and managers. By taking both students and teachers into consideration, a comparatively complete description of the status quo of blended learning in English Department of NCEPU has been formed, which set a good example for other departments and at the same time motivates the whole school to update their learning and teaching patterns.

General Terms- Blended Learning, Questionnaire, Interview

Keywords- Case Study, English Department, NCEPU

1. INTRODUCTION

Blended learning, which is proved to have a promising future, has incomparable advantages in learning and teaching practices. By combining a face-to-face class with an online learning experience, it will be a better way to promote the quality of teaching and thus acquires the best result compared with the traditional learning or E-learning respectively. Blended learning was put forward by American Training Magazine and firstly regarded as a new way of learning in The American Education Technology White Paper, suggesting that E-learning can’t take the place of traditional teaching and learning model although it can realize certain educational objectives. These ideas lay a solid foundation for the spread of blended learning. In China, blended learning was introduced to academic field by Professor Zhu (2003). Through 15 years development of education, China has experienced lots of changes from CAI (computer-aided instruction), CAL (Computer Assisted Learning) to IITC (Integration of Information Technology into Curricula). All these approaches implicate the idea of blended learning all the time. In this paper a case study is conducted by taking the English Department of North China Electric Power University (shortened as NCEPU) as the sample. It combines quantitative and qualitative researches by adopting questionnaires and interviews to investigate the status quo of blended learning in college English learning and teaching. Besides, advices from the perspectives of multimedia application, students, teachers as well as teaching managers have been given to make improvement.

2. LITERATURE REVIEW

2.1. Definitions of Blended Learning

Generally speaking, foreign scholars define blended learning from three perspectives: learning style, teaching design as well as the combination of learners, designers and managers. Blended learning is a learning style. National Institute of Information Technology points out that, “Blended learning is a kind of learning style.” This style contained three types: face-to-face, real-time and self-pacing (2002). Mostly, blended learning is used to describe various transmission Medias, different learning events, diverse techniques and intelligent learning instructors combining together. Singh (2003) define blended learning as the 5R model. It means the right learning techniques matches right individual learning style so that it transforms into right ability for right individual in right time. Therefore, blended learning is a kind of learning style aiming to live up to the highest level of learning results. It bases on learners needs and characteristics to design the proper learning procedures, choose right learning contents and providing the appropriate learning circumstances. Blended learning is an idea of teaching design. Jennifer Hofmann (2002) thinks that “Blended learning is an idea of teaching design.” It focuses on realizing the best learning results through the best Medias or media combinations. Different Medias contains different components, for example, traditional classroom or lab settings, reading assignments, CD-ROM, performance support tools, telephone training, stand-alone Web-based
Blended learning is a combination of learners, designers, and managers. Michael Orey (2010) defines blended learning from the perspective of learners, designers, and managers. From the perspective of learners, blended learning is ability. It refers to combine the learning style with techniques, equipment, Medias, and textbooks in order to satisfy the objectives of teaching. From the teacher’s perspective, it means to organize and allocate techniques, equipment, Medias, and textbooks in a proper and efficient way. From the perspective of teaching managers, it is organizing and allocating valuable techniques, equipment, Medias, and textbooks as economically as possible. This definition states that blended learning must fit with learners learning style and reinforce the importance of techniques.

All the three definition covers some points of blended learning but misses the others. Foreign scholars pay much attention to training field so that most of them defines through the perspective of training. Education catches their eyes in recent years but the related definition is still at a superficial level.

2.2. Theoretical Foundations for Blended Learning

Behaviourism, Cognitive learning theory, and Constructivism learning theory are the three mainstream learning theories of blended learning. They justify the reliability and reasonability of blended learning. Meanwhile, they put a solid theoretical foundation for blended learning.

Behaviourism theory is also called stimulus-response theory. The representatives are Russian psychologist Pavlov (1927), American psychologist Watson (1991) and Skinner (1957). The basic concepts of behaviourism are four. Firstly, learning is the process of building a connection between stimulus and response. Secondly, it focuses on individuals apparent behaviours and is opposed to taking introspection as the studying object. Thirdly, it strengthens the importance of circumstances in individuals’ learning processes. Finally, it simplifies the teaching process into a set of routine. Typical behavioristics models are classical and operant conditioning, rote verbal learning, instrumental learning, and discrimination learning. Pavlov’s dog (1927) and Skinner’s boxes (1957) typify the position that organisms can be conditioned to respond in desired ways, given the correct degree and schedule of reinforcement. Based on Skinner’s boxes experiment, five principles are created. They are short-step principle, principles of active responding, principles of timely reinforcement, principles of self-pacing, and low error rate.

Cognitive learning theory is originated from the 1950s. The representatives are Bruner (1983) and Ausubel (1963), believing that learning is forming cognitive constructions in individuals’ inner hearts when facing the learning events. They pay lots of attention to the process of cognition. Cognitive theorists believe that learning is the change in the internal knowledge structure of learners. It’s more complex than stimulus-response reactions. Cognitive learning theory enriches the content of educational psychology and provided theoretical foundations for learning and teaching practices. They have five contributions. Firstly, it holds a positive attitude on learners’ initiatives and pays attention to learners’ self-values. Secondly, it strengthens the position of cognitive ability, meaningful learning and independent thinking during learning processes. Thirdly, it states that the achievements of a learner not only depended on external stimulus but determined by learners’ current knowledge levels, cognitive structures, and other internal elements. Fourthly, it emphasizes on reinforcement of integrative motivation and the learning activities themselves. Cognitive learning theories take learning as an active process. Last but not least, cognitive learning theories propose that creativity is necessary for learners’ learning processes. Bruner’s Finding Learning Theories (1983) emphasizes on learners’ flexibility, initiative, and exploration, and proposes that learners can cultivate intelligence potentials and adjust motivations through exploring study by them.

Constructivism is a branch of the cognitive psychology school. It blossoms in the late 1980s. It originates from Piaget’s psychological research on cognitive development of children (1954), Vygotsky’s zone of proximal development (1934), Bruner’s cognitive structure theory (1983) and Ausubel’s cognitive assimilation theories (1963). It proposed that learning is constructing internal psychological representations. It not only concerns about structural knowledge but also contains learners’ backgrounds and former experiences. Learning processes are making up of two aspects. On the one hand, it is the construction of the meaning of new information. On the other hand, it is the reconstructions and reorganizations of learners’ original experiences. Constructivism states that learning circumstances contain four elements. They are situation, cooperation, conversation and meaning construction. The situation means learning must under a certain social cultural background. Cooperation is a kind of learning methods. It requires learners interacting with each other during the learning processes in that it can get inspiration from each other. Conversation means learning through interactions and discussions. It can share each learner’s ideas with the whole group. Meaning construction means giving the old cognitive schema new meaning. It needs learners complete this process actively and initiative. To sum up, Constructivism puts learners at the centre of learning. It emphasizes on learners’ exploring and finding of knowledge.

Blended learning shows an integrated trend of different learning theories. The three learning theories are appearing in a continuous line. People may think the latter theory replaces the former due to its advanced ideas. It is a common misunderstanding. Every learning theory has its own advantages and disadvantages. They are equal in the position of the learning theories. To patch the gap up,
blended learning comes into our eyes in the 1990s. That is a great leap of learning and teaching theories. Lots of examples prove it will have a promising future.

2.3. Research Questions
Specifically, the following questions are addressed in this study:

- What’s the application of the internet in the learning processes?
- What’s the frequency of E-learning (use the internet for learning)?
- What’s the time span of surfing the internet?
- What are the obstacles to blended learning?
- What’s the satisfaction degree of blended learning in English Department?

3. METHODOLOGY

3.1. Participants
The subjects include 100 students of English Department in NCPEU. The demographic information is shown in Fig.1, Fig. 2 and Fig.3. 83% are females and 17% are males, who come from different majors: 87% of them major in English and 13% major in Translation. Meanwhile, as shown in Fig. 3-3, they are in different grades: the freshmen occupy 30%; the sophomores constitute 30%; the junior students hold 31%; the senior students account for 9%.

3.2. Data Collection
Various methods of data collection have been adopted in this study, involving an questionnaire and an interview. The questionnaire is composed of two parts. Part 1 is basic information survey. The questions are about gender, grades, majors and situations of students’ e-learning and cooperating learning. This part mainly surveys the items that are difficult to evaluate through grading scale. Part 2 adopts grading scale. This part contains 35 questions which belong to five categories. The first category is students’ characteristics, which contain students’ adaptation towards E-learning and the internet’s self-efficacy. The second category concerns teachers’ characteristics, including teachers’ attitudes, the timeliness of response and the degree of interaction with students. The third category is courses’ characteristics, which are made up of the adaptation, flexibility, and richness of the course. The fourth category aims at the characteristics of systems which consist of efficiency, effect, convenience, and briefness. The fifth category points to the future of blended learning and investigates students’ attitudes on blended learning applied to college English classes. Each question has five chooses which vary in the degree of agreement. The subjects need to choose one from the five. The A meant completely disagreement and the E meant completely agreement. The more the subject agrees with the statement, the higher score he or she gets. The A referred to 1 point that is the lowest and the E meant 5 points which is the highest score.

The interview aims to get a deeper understanding of the blended learning in English Department of NCEPU. I interview 4 teachers who taught the main courses of English Department. The age of teacher A, B, C and D ranged from 30 to 40. All of them teach English classes for at least 10 years. Also, they teach more than three main courses of English Department. So they have experienced English teachers and at the same time, their opinions are representative and valuable. The questions of the interview are categorized into four aspects. The first is the comparison and contrast of traditional English class and the modern English class. Teachers needed to point out the changes of the class. Second is about the teaching resources. The third is teaching methods. The last one is the ideas or advice on the blended learning. During the interview, recording machine is employed to record the voices which are replayed and analyzed over and over again.

3.3. Procedures
As for the questionnaire, in the first period, during April to May, 30 students are accepted pretest to justify the validity and credibility of the questions and the organization. Then, according to the result, Cronbach’s Alpha is 0.798 and Cronbach’s Alpha based on the standardized items is 0.811. That means the questionnaire is accepted but needs to be improved. Thus, 6, 7, 8, 12, 13, 28 are deleted and 24, 25 are polished. In the second period, after examining the 40 questions, the questions are deleted and changed to
35. After that, 100 questionnaires are giving out to students from Grade 1 to Grade 4. According to the SPSS reliability testing, Cronbach’s Alpha is 0.935. That means the questionnaire was reliable. In the third period, after the questionnaire is finished, 100 copies are handed out to 100 subjects. 100% of them are collected and studied. When it comes to interview, firstly, in May, during the process of research, four teachers who teach the main courses of English Department are interviewed one by one and asked questions that cannot be answered through questionnaires. The whole interview processes are recorded. Secondly, the interview notes and records are analyzed over and over again. Thirdly, through comparison and contrast among all the answers, the similarities and differences of teachers are summarized and presented. In conclusion, this chapter provides a solid foundation for the next chapter. It designs the practical procedures for the implementation. Thus, the reasonable and reliable results are able to acquire.

4. RESULTS

Results are presented from four aspects. Firstly, it shows the results of questionnaire and interview. Secondly, it discusses the results from the perspectives of resources, circumstances, and methods. Thirdly, a comparison and contrast with Beijing University is made. Finally, the existing problems of English Department of NCEPU are figured out.

4.1. Questionnaires

In the Part 1 of questionnaires, four questions are set to investigate the status quo of students’ blended learning situations, involving the application of the internet during the processes of learning, the frequency of using the internet for study, the time span of using the internet for study, and the obstacles in E-learning process. The results are shown in Fig. 4, Fig. 5, Fig. 6 and Table 1 respectively.

From Fig. 4 it is interesting to find that “Join in the Online Class” is popular among sophomores and senior students. After a short interview, the reason is proved to be concern about the MOOC. Lots of sophomores and senior students select MOOC as their public elective course. From this finding, it is said that MOOC is more popular among sophomores and senior students than freshmen and senior students.

From Fig. 5 it is reasonable to believe that the frequency of using the internet for study rises up with the rising of grades. Also, employing the internet for study over five times in a week is the main trend among college students.

From Fig. 6, it finds out that the main body of college students spent 2-3 hours on E-learning. Spending more than 3 hours or less than one hour was a comparatively a small group.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Obstacle 1</th>
<th>Obstacle 2</th>
<th>Obstacle 3</th>
<th>Obstacle 4</th>
<th>Obstacle 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>10</td>
<td>1</td>
<td>9</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Sophomores</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Junior</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Students</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

Note
Obstacle 1: Not Clear about the Objectives
Obstacle 2: Unnecessary E-learning
Obstacle 3: Have no idea on How to learn
Obstacle 4: Lack of Testing System
Obstacle 5: Bad Self-monitoring Ability

From Table 1, it is not hard to notice that “Bad Self-monitoring Ability”, “Lack of Testing System” and “Not Clear about the Objectives” are the three common obstacles of employing the internet for study according to college students.

According to Part 2 of questionnaires, five dimensions of questions are prepared to rank the satisfaction degree of
the blended learning, including students’ characteristics, teachers’ characteristics, features of courses, features of systems, and students’ attitudes on blended learning applied to college English classes.

![Fig. 7 Satisfaction Degree](image)

![Fig. 8 Average Score of Satisfaction Degree](image)

As is shown in Fig. 7 and Fig. 8, the freshmen score 125.23; the sophomores score 125.33; the junior students score 119.03, and the senior students score 126.44. The higher the score is, the better the blended learning situation will be. From this result, it draws a conclusion that sophomores perform well in blended learning whereas junior students are the worst. However, sophomores thought comparatively lowly of blended learning and not hold a positive attitude on it whereas senior students perform moderately in blended learning but they hold a positive attitude on the future development of blended learning. In conclusion, senior students are the best in blended learning and junior students are at the bottom of the blended learning performance.

It is rational to hypothesize that senior students are more mature in the learning patterns and know better of the learning of themselves. So they perform comparatively good and held a positive attitude of blended learning. Unfortunately, junior students are just starting their professional courses learning. The polarization of them is huge and that lead to the result that the overall blended learning level is not high.

### 4.2. Interviews

This research interviews 4 teachers of English Department, named A, B, C and D. As for the comparison and contrast of traditional English class and the modern English class, Teacher A stated that “Great changes happened in modern classes. The most apparent change is the application of the internet in class.” Teacher B illustrated that the relationship between teachers and students change a lot. Students play the more and more important role in the class. They transform from followers to leaders.” Teacher C and Teacher D all agrees to Teacher A’s opinion. As for the teaching resources, Teacher A and Teacher C employs teaching materials from the internet in a high frequency. Teacher B thinks it takes too much time and it isn’t economic. So he is at a lower frequency. Teacher D points out that he chooses the comprehensible material for students in colossal resources. The third question is teaching methods. Teacher A, B, and C states that they adopt group learning and cooperative learning methods in almost every class. However, Teacher D presents the view that methods must be in accordance with the types of classes. The last one is the ideas or advice on the blended learning. Teacher A, B, C, and D all think blended learning is going to have a promising future. However, there are deficiencies exist in English Department. For example, the indifference of authority and the weak equipment.

All of the interviewed teachers think highly of blended learning. Also, they think blended learning is going to have a promising future. When it comes to the comparison and contrast with the traditional classroom, teachers reflect that more and more components of blended learning come into modern English classrooms. The result of blended learning is proved to be good. In the aspect of teaching resources, teachers say that they would adopt lots of the Internet teaching resources. As for teaching methods, all of them say that they use group discussions and collaborative learning during the classes.

However, teacher A points out that the obstacles to blended learning in English Department is the indifference of authorizes whereas the teacher B thinks the reason is the lack of economic supports.

Also, teacher C thinks blended learning is fit for every kind of class but Teacher D doesn’t regard blended learning as “one fit all” theory. In the light of the established analytical framework, taking background information, Curriculum Provision, cooperative learning and out-of-class experience as environmental influences, the cognitive competence, affective characters (critical thinking disposition), goal orientation, attribute, and self-efficacy as individual influences, learning strategy and learning achievement as behavior influences, the paper tends to explain way to develop critical thinking.

### 5. DISCUSSION

#### 5.1. Status quo of blended learning in English Department of NCEPU

Combined the questionnaire information with the interview of teachers, the status quo of blended learning in English Department of NCEPU is described through the perspectives of resources, circumstances, and methods.

The learning resources are mainly coming from online learning courses, multimedia assisted learning and teaching, face-to-face learning and learning from
experiences sharing. The blended of all the resources greatly enhance the quality of learning and teaching. English Department performs well on the blending of multimedia assisted learning and teaching with face-to-face learning. However, the online courses are not fully employed. According to the interview, most of the teachers think it should be blamed for the lack of the internet in the classroom’s computers. Also, according to students’ feedback, this situation should be blamed to the low speed of the internet which takes them more time to study online. The impatient students drop the time-costing resources of learning.

The circumstances of learning are categorized into two groups: the formal learning circumstances and the informal learning circumstances. The courses of English Department mainly belong to formal learning circumstances. The blended degree is comparatively low. The informal learning circumstances could be everywhere except classroom.

The teaching methods contain grammar translation methods, communicative methods, and audio-lingual methods and so on. According to the investigation, lots of classes of English Department only blend one or two language teaching methods. The highly used methods are audio-lingual methods and grammar translation methods. Fortunately, communicative methods occupy more and more space in the language teaching classroom. That is a positive trend but it is not enough. Some other learning methods such as community language learning, Suggestopedia, and other humanistic learning methods are playing a more and more important role in the learning processes. Each of learning methods captures some aspects of the complexity of learning but misses out on others. A single or double learning methods combine together cannot cover all the aspects of learning processes. The mixture of learning methods wouldn’t cause the drawbacks but compensate for each other. Only to get a compromise among different learning methods lives up to the ideal result.

5.2. Existing Problems

During the investigation, many problems came into our sights.

Firstly, the problem of multimedia’s utilization exists in the classroom. Multimedia resources are short of quantity and quality. The device in the classroom is not getting in touch with the internet. So the resources must rely on teachers’ mobile storing device. The quantity of resource is thus limited. Also, some of the PPT play by computer is just the copy of textbook. Students just transform from looking at paper books to staring at screens. That is meaningless and not what the blended learning urged. Meanwhile, according to the questionnaires, students state that the PPT slides too fast to catch up with. If teachers ignore students’ cognitive ability and receptivity and only duck-stuffed students with a huge amount of information that is too much for students to accept, students cannot acquire knowledge. Krashen’s Input Hypothesis said when the input knowledge is one step forward than students’ current levels. The input is comprehensible. If the input is too high or too low than students’ current level, the knowledge cannot be learned. The inefficient PPT forces the students to be audiences rather than participants of the class.

Secondly, teachers’ problems exist during teaching processes. Although more and more teacher gradually accepted the new teaching techniques and theories, they still stay at a superficial level. According to some of the students’ feedback, teachers don’t guide them in the aspect of learning methods and learning strategies during E-learning. In accordance with the idea of blended learning, teachers should play the role of organizer and guide. Thus it could accelerate the improvement of students. During this process, the theoretical foundations of teaching and the ability to put teaching techniques into practical are the keys of a successful class. Any components lost are going to cause the disasters of classes.

Thirdly, students’ problems exist during the learning processes. The idea of blended learning is in accordance with the idea of constructivism in the aspect of students’ role as the main body of classes. It strengthens students’ positive exploring and finding of the new knowledge. Blended learning provides a good environment for students to fully develop their innovations and independence. However, in the processes of implementing, students psychological and physical conditions cause inefficiency of learning. College students are in a state of instability. They have low self-control ability, emotional and could not concentrate on one thing. These characteristics stand in the opposite of blended learning. For example, teachers assign the homework for students but when students try to finish it, they may face obstacles. They feel interesting at the beginning but soon the feeling of freshness is going to fade out in face of difficulties. Also, college students have low tolerance for uncertainty. Through questionnaires, it is easy to notice that some of the students would feel nervous and resist the unfamiliar thing. Blended learning is still a new learning method for students to accept. They doubt the efficiency and practicableness of it. The two problems are going to harm the long-term development of blended learning in English Department of NCEPU.

6. CONCLUSIONS AND IMPLICATIONS

Three major findings are discovered by conveying the questionnaire and the interview. Firstly, both teachers and students of English Department of NCEPU think highly of blended learning and have a significant demand for blended learning. Secondly, according to the research data, Blended learning classes is not prominent in English Department of NCEPU. Thirdly, according to the investigation on satisfactory degree, teachers and students are not satisfied with the current situation and have an urgent need for the enhancements.

Aiming at the existing problems, the following constructive advices are given.
As for multimedia application, the problems can be solved through two ways. Firstly, it needs to deal with the problem of awareness. The teaching managers and teachers should be in consistence with each other in the aspect of multimedia application. Thus, it not only guarantees the financial support from the authority but also prepares ideological basis for the future development of blended learning. Secondly, the training towards the appropriate application of multimedia should be implemented among teachers. For example, English Department may hold some PPT-technique-sharing seminars or invite some students to give constructive advice for teachers. It bridges the information gap between students and teachers and also reduces the problems of multimedia application.

As for teachers, they should solid their theoretical foundations. Teachers need to guide students on a macro level. For instance, teachers should help students know better of themselves including what kind of learners they belonged to and what learning techniques and strategies they adopt when to being in the process of blended learning. In order to give the students more professional guidance, teachers need to equip themselves with the solid theoretical foundations. Except for the traditional role of the class, teachers also need to shoulder the following responsibilities: the first is adjusting the learning processes. They should give a time schedule of learning procedures, set up the objectives of learning, and provide the enough comprehensible learning material.

As for students, they should adjust their psychological and physical conditions to a health state. To join the psychological classes is a good way to get professional guidance. Also, students could choose to interact with teachers in order to know more about blended learning. Communication lowers the anxiety and uncertainty of students’ inner hearts. At this time, positive feedback from peers, teachers, and students themselves counted. As for teaching managers, they are required to organize all the learning and teaching components in an economical way. Firstly, they should construct a self-regulated learning model that connected students and teachers. Self-regulated learning is not only concerning about learners but also teachers. It not only depends on students’ ability but also teachers’ ability. According to the results of the investigation, the more the teacher emphasizes on the blended learning, the better the blended learning would be. Secondly, teaching managers should build the effective testing systems of self-regulated learning. The standardized testing system not aims to judge the students’ knowledge level but strengthens the awareness of students’ self-regulated learning. Under this principle, testing has a positive influence on evaluating, stimulating and correcting the learning processes.

ACKNOWLEDGEMENT

This research was financially supported by the Fundamental Research Funds for the Central Universities (Grant NO. 2015MS67)

REFERENCES


Author’s Biography

Guo Zhe was born in Hebei Province, China, in 1979. She received the Master degree in English Linguistics and Literature from North China Electric Power University (Shortened as NCEPU), China, in 2005.

In 2005, she joined the English Department, NCEPU, as an assistant, and in 2007 became a lecturer. Her current research interests include second language acquisition and contrastive linguistics. She is the Dean of Center for Comparative Linguistics in NCEPU.