

The Influence of Blended Learning on English Learning Motivation and Achievement of English Majors

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Abstract: Blended learning is the combination of network learning and classroom learning, which is a supplement of the conventional teaching mode. As the continuous advancement of the Internet, blended learning is becoming increasingly prevalent. This paper mainly discusses the influence of blended learning on English learning motivation and achievement of English majors. Quantitative research is adopted through questionnaire survey on students majoring in English Education in the college of Arts and Sciences of Hubei Normal University. The questionnaire includes basic personal information, the motivation of students' learning under blended learning and the experience of blended learning. The results show that blended learning mode can improve students' English learning motivation.

1. Introduction

1.1. Research Background

Since the late 1990s, e-learning has cultivated sharply in the field of education, which has enhanced educational innovation and produced many new educational insights. During the application of e-learning, people gradually realize that different questions required different approaches to solve them. "Blended learning was early used in the field of enterprise training" (Wang Xue, 2014). Considering the diverse training objects. Enterprises gradually explore the combination of online training and traditional training in the practice of applied e-learning training. This learning mode is also gradually applied to the field of education[1]. The biggest distinction both blended learning and traditional learning methods is the use of the internet and social media to improve teaching content. In addition, this teaching method has been used by many people at the beginning of popularity, which indicates that this method has become a requirement of the times[2].

The traditional teaching method is generally offline teaching, in which students are concentrated in a classroom, and then teachers teach in a unified way. This teaching method is fixed in time and

place, and lacks flexibility. A single teaching method also may make students have little chance to rebuild their knowledge, and they can only acquire simple knowledge. For a long time, they will learn with a negative attitude[3].

1.2. Research Objective

As the continuous advancement of science and technology, in the late nineties, students' learning is mainly offline learning. Later, blended learning in higher education has become particularly important[4]. However, because the application of blended learning is influenced by network technology and teaching conditions, the internet cannot be fully applied at school. "The research on blended learning in the world began in 2001 and had been on the rise since 2006" [7]. This study is mainly founded on the background of higher education classroom, and quantitative method is used through questionnaire survey. The main aim of this study is to discuss the influence of blended learning on English majors' learning motivation. I hope this study can contribute to blended learning[5].

1.3. The Significance of the Research

Yenice Saydam and Telli (2012) studies show that one of the goals of education is to improve learners in cognitive and emotional fields. Learning motivation is one of the chief ingredients affecting students' success level[6]. Motivation is defined as the internal state that leads to the appearance and guidance of student's behavior. Many researchers have their own opinions on the relationship between success and motivation. For example, Keller (1980), Maslow (1970) and Likert (1981) think that different learning environments and patterns affect students' grades and motivation. As blended learning becomes more and more popular, it is necessary to learn about the impact of blended learning on students' learning motivation. Moreover, existing studies have shown that blended learning has a great deal of advantages, which can be more flexible, keep knowledge for a longer time, improve learning interest and increase opportunities for interaction. On the one hand, in the mode of blended learning, students can participate beyond the limitation of time and place. On the other hand, they can share their knowledge with their friends or teachers. Teachers can also improve teaching methods, according to the characteristics of students. Theoretically, this study can not only enrich the academic research results of blended learning, but also provide research basis for the promotion of blended learning in higher education[8].

1.4. Research Questions

By describing the purpose of this experiment, this paper mainly answers the following problems: What are students' perceptions of blended learning?

Under the blended learning model, are there significant differences between students' motivational pre-test scores and post-test scores?

Does blended learning have a significant influence on the learning motivation of English majors?

2. Literature Review

2.1. Blended Learning

Blended learning not only uses the traditional face-to-face mode of teaching, but also takes advantages of the internet. Driscoll (2002) made a more comprehensive discussion of blended learning. She thought that blended learning means that in order to accomplish a certain teaching

goal, the learning process can be a combination of web-based techniques and traditional classroom learning to achieves the most ideal teaching effect jointly[9]. In China, Professor He Kukang (2003) proposed the notion of blended learning, he pointed out that "the so-called blended learning combines the advantages of traditional learning methods with e-learning". In other words, in order to achieve the best learning results, teachers should not only play the leading role of teachers in guiding, but also enlighten students' enthusiasm, initiative and creativity in their learning process. In this way, the best learning effect can be achieved[10]. However, there are some disadvantages to blended learning, for example, the level of students using the Internet is uneven. Secondly, weather they can use the Internet for learning, rather than playing games and watching videos. Finally, some learning materials on the Internet need VIP to use.

2.2. English Learning Motivation

Learning motivation refers to the tendency which can cause and maintain students' learning behavior to gain certain goals. For English majors, they accept not only online learning, but also offline learning. What will happen to their learning motivation? Learning motivation can be divided into intrinsic motivation and extrinsic motivation, which have a certain effect on students' learning. Among them, internal motivation includes factors such as students' desire for knowledge, interest, ability and so on. External motivation includes factors such as parents and teachers' demand, pressure or other objective reasons[11]. According to the theory of learning motivation, we choose the factors of interest and forced learning to test whether blended learning will affect students' learning motivation.

2.3. Theoretical Framework

Constructivism holds that knowledge is actively acquired by the learner in a certain situation, with the help of the teacher and other learners, through the construction of meaning and not the direct transmission of the teacher. Blended learning seems that students acquire a deal of knowledge depending on the learner's ability to build the meaning of knowledge based on their own experience with the help of the teacher, rather than to reproduce the teacher's thinking process. This is consistent with the view of constructivism "the quality of learning relies on the learner's ability to construct the meaning of knowledge based on his own experience, not to memorize what the teacher teaches." Constructivism emphasizes students' initiative and enthusiasm for learning, which has a positive role in promoting learning motivation.

3. Research Methodology

This questionnaire is mainly to explore blended learning. Questionnaire survey is conducted on students of English Education in College of Arts and Sciences of Hubei Normal University to obtain the corresponding data about their learning situation and learning motivation under the blended learning mode, and make effective analysis on the data. The questionnaire mainly includes students' personal information, students' learning motivation under blended learning and their learning experience of blended learning.

3.1. Research Sample

The subjects of this questionnaire are the senior students of English Education in the Department of Humanities, College of Arts and Sciences Hubei normal University. The participants consisted of 65 students. Because this experiment is a quasi-experimental study, the selection of participants is

not random. The researcher used a table for selecting participants to determine the experimental and control classes. (The table is mainly based on data, such as computer usage level and network usage frequency.) Based on the design principles of the quasi-experiment, it is assumed that the students in the experimental group and control group are similarly influenced by other factors in addition to the influence of variables.

The researcher designated classes with higher levels of access and use of the network as experimental groups, a total of 33(11 boys and 22 girls) and classes with lower levels of access and use of the network as control groups, a total of 32(14 boys and 18 girls).

3.2. Research Instrument

Research tools is divided into three parts: English academic performance tests and motivation scales.

3.2.1. English Academic Performance Test

The purpose of the test is to mainly test student's mastery of what they have studied. The questions of the test are compiled by researchers in the light of the syllabus and teaching objective of the English course, with reference to the authoritative question banks of major websites. Three professional teachers with over ten years of teaching experience were invited to estimate these issues to assure the effectiveness of the content. After the revision was completed, the two classes would finish these. Correct answers are counted as 1 point, incorrect answers or no answers as 0 points for correct answers, incorrect answers or no answers Score 0. The test results are analyzed using SPSS. The difficulty of these questions ranges from 0.31 to 0.85, and the discrimination is 0.36 to 0.92. The KR—20 value is 0.718, indicating that the test has good reliability.

3.2.2. Motivation Scales

The most extensively used measure of motivation to learn English abroad is Gardner's *Attitude/Motivation Measurement Scale*. Domestic scholars, Li Jiongying and Liu Penghui, conceived the "*English Learning Motivation Scale of Chinese Undergraduates*" in 2017. Through empirical research, it formed a final scale of reliability and validity that are ideal. According to the framework of the Gardner scale, Li Jiongying and Liu Penghui, a total of 35 questions in this study. The researcher use the Likert five-level scale to evaluate, with 1-5 scales indicating very disagreement, basic disagreement, uncertainty, basic approval and very approval. According to their actual situation, the participants filled out the form and calculated the score.

3.3. Data Collection

The study lasted 8 weeks and consisted of 32 lessons. All students took the English academic performance test and motivation test before the first week. In the final week, they also took these tests. The time of study did not include the time of the test.

Control group: Its teaching activities are face-to-face learning based on constructivist learning method, and the curriculum is designed according to the syllabus. The four lessons per week are divided into warming up, exploration, explanation, extension and evaluation stages. The class uses the method of question and answer, discussion, group cooperation, problem solving and so on. Using textbook, phonetic manuals and workbooks as course materials to select appropriate unit activities. At the end of each lesson, students are assigned the exercises in the textbook. The homework is checked and evaluated before the next lesson.

Experimental group: according to the content of the unit, the teaching activities of the

experimental group decompose the contents of 4 hours per week into two hours of traditional learning and two hours of online learning. Face-to-face learning is taught in the same way as other small groups, with some face-to-face activities being carried out at the same time as online activities, which are done by students independently or in small groups. In addition to teaching materials, exercise books and other resources, Xue Xitong application is also used. The website shows the unit activities in the textbook.

3.3.1. Reliability and Validity

(1) Reliability Analysis

"Reliability is dependability, which refers to the degree of consistency of measurement results when the same target is repeatedly measured with the same way." (W. Steve Lang, Ph.D. 2008). Reliability refers to the consistency, stability and dependability of the test results. Generally speaking, internal consistency is used to express the reliability of the test. The higher the reliability coefficient, the more consistent, stable and reliable the results of the test. Therefore, reliability is exceedingly vital to the results of the questionnaire. Cronbach's alpha coefficient is the most significant indicator of reliability, which can be expressed by α . As a whole, the higher the coefficient, the higher the reliability of the date. The coefficient of α is between 0 and 1, it is necessary to greater than or equal to 0.5, and a coefficient which is greater than 0.7 is ideal. The reliability statistics of learning motivation is 0.934, which proves an ideal state. Similarly, the reliability statistics of attitude in blended learning is 0.968, which is an ideal state. The questionnaire on the influence of college students' learning motivation on blended learning experience has been used by many people, which proves that the reliability is good, As shown in Table 1 and 2.

Table 1. Reliability statistics of motivation

Reliability Statistics				
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items		
.943	.945	16		

Table 2. Reliability statistics of attitude

Reliability Statistics				
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items		
.968	.968	19		

(2) Validity Analysis

"Validity is effectiveness, which refers to the degree to which measuring tools or means can accurately measure specific things." (W. Steve Lang, Ph.D. 2008) Validity refers to the degree to which the measured results reflect the content to be investigated. The more consistent the measured results are, the higher the validity is, on the contrary, the lower the validity is. The questionnaire content of this study contains the questions to be investigated in this paper, which proves that it has certain research validity.

3.3.2. Correlation Analysis

Whether there is a correlation between motivation and attitude that needs to be proved by Pearson Correlation Coefficient. Pearson correlation is used to survey the correlation between two variables x and y, its value is between -1 and 1, and the coefficient is expressed by r. If r is bigger than zero, it means that there is a correlation between the variables, that is, one value will get bigger

as the other gets bigger. If r is lower than zero, the two variables are negatively correlated, that is, one value becomes larger, and the other value becomes smaller. The larger the absolute value of r, the stringer the correlation. If r is equal to 0, the two variables are not linearly correlated. Using SPSS to analyze the test results, the correlation between motivation and attitude is 0.721, which shows that there is a good correlation between motivation and attitude, as shonw in Table 3.

Correlations					
		Motivation	Learning Effect		
Motivation	Pearson Correlation	1	.712**		
	Sig. (2-tailed)		.000		
	N	104	104		
Learning Effect	Pearson Correlation	.712**	1		
	Sig. (2-tailed)	.000			
	N	104	104		
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 3. Correlation analysis

4. Research Results

28.85 percent of respondents often use blended learning in school. Those who occasionally use blended learning account for 55.77 per cent. Those who rarely use blended learning account for 15.38 percent. It's not hard to see from this data that most students often use the internet to learn. However, students' proficiency in using online learning is 39.42 percent at the primary level. The level of proficiency is 55.77 per cent at the intermediate level. The proficiency level is 4.81 per cent of the expert level. There are 56.73 per cent of students who spend 1-3 hours studying College English each week. 24.04 percent for 4-6 hours. 5.77 per cent for 7-9 hour. More than 10 hours are 13.46 per cent.

The author collected and analyzed those valid questionnaires accomplished by students in the college of Arts and Science of Hubei Normal University. After students have been exposed to blended learning, they may have different feelings. Some people may be satisfied with blended learning, or in other words, they are able to adapt to this new learning method. But, uh, maybe some students are used to the traditional learning. For the questionnaire, from the question 1-19, the general mean for 19 questions is 3.526. It shows that students are content with blended learning. It is obvious in the chart as the first question that illustrate 49% participants think that their computer technology was sufficient to participate in blended learning activities. When it comes to blended learning environments, 48% students can learn easily, 46% students think the environment is suitable for their learning style, and 44% students has learning motivation. The second question shows that 51% students are able to engage in blended learning. According to the third question and the fifth question, 55% shows that the blended learning method can satisfy the needs of students' English learning, 53% students can learn something from teachers' feedback. 49% students can communicate well with their teachers online. From the sixth question, 50% students can strive for the learning goal. 58% students deem blended learning is difficult. 43.27% students are neutral to this view: I communicate more with my classmates online than in the traditional classroom. Most students consider that they do well in learning English, which contains 54%. The tenth question shows that 51% students are able to divide their time between online and offline learning, and they can understand the content in the textbook in the form of handing homework online. The eleventh question shows that 52% students think universities should offer more blended courses. The sixteenth question indicates that in the blended mode, the teachers' encouragement makes most students learn more. In the last questions, half of the students consider that blended learning is conducive to their learning and are satisfied with it.

After surveying the students' perceptions on blended learning, the author investigated the students' learning motivation. Students' learning motivation is divided into two categories: interest and forced learning, and each category includes eight questions. There are sixteen questions with 1, 2, 5, 6, 9, 10, 13, 14 belonging to the interest, and the mean is 3.424. It shows that most students are interested in blended learning. To be specific, from item 1, 5, 9 and 13, fifty-one percent of the respondents say blended learning seems interesting. Fifty-two percent of students are happy with blended learning. Fifty-one percent of students think blended learning is fun. Fifty-three percent of students feel good about blended learning. This shows that students still have a curiosity about blended learning. According to item 2 and item 6, after being exposed to blended learning, fifty-seven percent of students benefit from it. Similarly, sixty-two percent of students think that blended learning is beneficial. Item 14 shows that fifty-one percent of students think blended learning is momentous. From item 10, fifty-three percent of students decide to take part in blended learning, as shown in Figure 1.

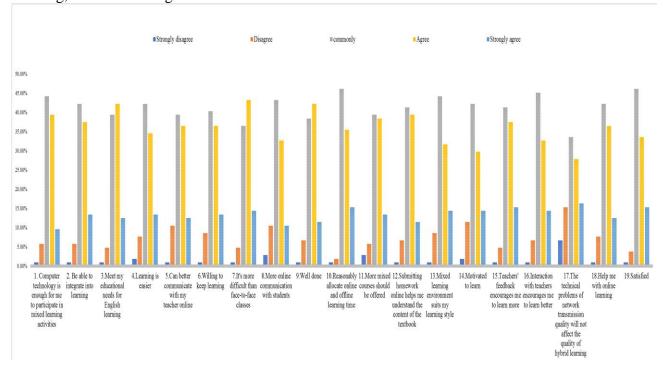


Figure 2. A questionnaire survey on students' attitude towards blended learning

From the question3, 4, 7, 8, 11, 12, 15 and 16, these questions are mainly about students being forced to take part in blended learning. From the seventh question, 51% students have to take part in blended learning. In addition, investigations are neutral on the rest of the questions. There is not enough reason to take part in blended learning (50%). Students are forced to take part in blended learning by their parents or teachers oppress (50.96%), and for pressure and other objective reasons (44.23%). Students have no other choice but to do it (44.23%). They do not know what benefits they could get from blended learning (43.27%). Have been involved in blended learning, but 42.31 percent of the students do not know whether it is wonderful to continue to learn like this. What's more, they are not sure the value of blended learning is not worth participating in. As can be seen from the above data, Students' English learning motivation has improved, as shown in Figure 2..

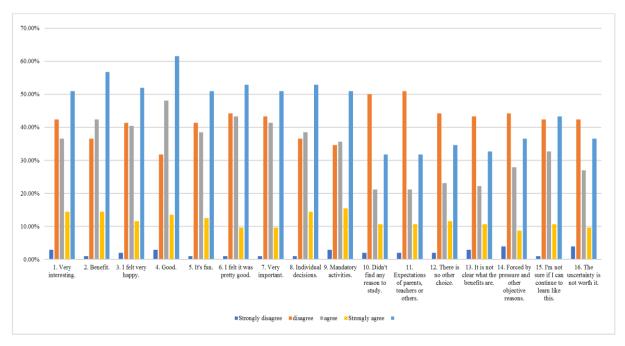


Figure 3. A questionnaire survey on learning motivation in blended learning for college students

5. Conclusion and Recommendations

This study investigates the influence of blended learning on learning motivation and achievement for English majors, according to the results of the survey, blended learning mode can improve students' English learning motivation. According to the data of the standard deviation and average of the pre-test and post-test scores of the students in the control group and the experimental group, it can be seen that the scores of the experimental group have improved significantly, while the scores of the control group have not improved much. There were no significant differences in academic achievement scores among the three groups, however, on the post-test scores, the blended learning group scored higher than the face-to-face learning group. We can conclude that under the blended learning model, there is a significant difference between the students' motivational pre-test and post-test scores.

According to the survey, students are becoming more proficient in the internet. Compared with traditional learning, blended learning becomes more mysterious, and students will become more and more interested in blended learning. They can not only learn from blended learning, but also enjoy participating in blended learning. Whether under pressure, parents, teachers or other objective reasons, students have to engage in blended learning. To sum up, in the blended learning mode, motivation will affect students' learning of English. For those who have took part in blended learning, most of them are satisfied with their experience. They hope to have more blended learning courses and get the learning content they want. According to the survey, we can see that attitude also affects students' learning of English. According to Pearson's correlation coefficient, there is also a correlation between motivation and attitude. This is only part of the author's research; the data may lack a certain validity. In-depth interviews with teachers on these issues are also needed to further understand and obtain the impact of blended learning on learning motivation.

The results show that blended learning has an impact on students' learning motivation. The literature review indicates that the current research focuses on the success of blended learning and the guarantee of continuous learning. As the conclusion of the questionnaire show, most students are more content with blended learning and think that they can get some benefits from it. For example:

better understanding of what they have learned, communicating well with their teacher, feeling happy. The researchers believe that in the process of developing blended learning, we can use video materials in face-to-face learning class, so that students can fully utilize the classroom time to self-study the teaching content and complete their homework within the specified time. In this way, we can not only use the internet to learn, but also complete homework on the internet. As the saying goes, kill two birds with one stone. There are advantages and disadvantages in blended learning. There may be some failures in class, for example, teachers and students do not interact well, so classroom efficiency is not ideal. For example: the web page cannot be accessed, the server makes errors, there is not enough time to interact in class. This will greatly reduce the progress of learning; students will also feel boring. There are also the students in the internet class, self-control is relatively poor, they do not listen carefully without the supervision of the teacher, easy to stray. Many teachers may also be unfamiliar with internet teaching and need to spend time exploring. The actual teaching progress may be a little bit worse than the traditional teaching progress. It takes more time to teach.

In view of these situations, the optimization of blended learning can improve students' motivation, therefore the author makes the following suggestions. First of all, teachers should design each class well. They need to integrate the advantages of online learning and offline classroom teaching; design courses based on the learners' perspective and provide visual learning process to cultivate students' self-learning awareness consciously and to stimulate students' learning motivation. Secondly, students should take the initiative to carry out blended learning, but not only limited to the traditional face-to-face learning. Last but not least, relevant learning software on the internet should be continuously optimized to provide more high-quality resources in line with students' learning.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

References

- [1] Yenice, N., Saydam, G., & Telli, S.(2012). Determining factors effecting on primary school students' motivation towards science learning. Ahievran Üniversitesi K?rşehir Eĝitim Fakültesi Dergisi, 13(2), 231-247.
- [2] Chen Chunjin, Wang Hong. The impact of blended learning and online learning on students' learning effectiveness meta-analysis of 47 experiments and quasi experiments. Open Education Research, 2013 (2): 69-78. DOI:CNKI:SUN:JFJJ.0.2013-02-011

- [3] Feng Xiaoying, sun Yuwei, Cao Jieting. Hybrid learning in the "Internet +" era: the basis of learning theory and teaching methodology. China Distance Education, 2019, (2): 7-16. DOI:10.13541/j.cnki.chinade.20190127.002
- [4] He Kekang. New developments in the field of educational technology seen from Blended Learning. China Audio Visual Education, 2014 (4): 5-10
- [5] Lin Zhihui, Tang Liang, Zhao Jinlong. Practical Research on Mixed Teaching Mode. Electronic test, 2019 (4): 127-128
- [6] Li Jiongying, Liu Penghui. An Empirical Study on Foreign Language Learning Motivation of Chinese Undergraduates. Journal of Xi'an Foreign Studies University, 2017 (2): 63-68. DOI:10.3969/j.issn.1007-1563.2012.01.017
- [7] Wang Lu, Liu Min. The influence of blended learning on college students' English learning achievement and motivation. Journal of Hubei Normal University, 2019, (6), 92-96
- [8] Wang Shuli. Research on the influence of blended learning on college students' learning motivation and learning effectiveness. Central China Normal University, 2017
- [9] Wang Jingxin, Yuan Shuai, Zhao Guodong. The impact of mixed teaching on college students' learning effectiveness an empirical study based on the application effect of Mooc in domestic first-class universities. Modern Distance Education, 2018 (05): 39-47. DOI:CNKI:SUN:YUAN.0.2018-05-005
- [10] Yang Qi. Experimental Research on the Teaching Mode of the "Mixed Learning" Course. Journal of Huangshan University, 2019 (4): 122-123
- [11] Zhang Hui. Research on the Influence of Mixed Teaching Mode on Foreign Language Learning Motivation of Higher Vocational Students. Journal of Hunan Polytechnic of Posts and Telecommunications, 2020 (2): 78-81. DOI:10.3969/j.issn.2095-7661.2020.02.023