An Investigation and Research on the Effectiveness of College English Online Learning

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ABSTRACT

To investigate the status quo of college English online learning effectiveness among freshmen, and propose specific solutions, a questionnaire was done among 1047 freshmen from colleges and universities, and data analysis was conducted with SPSS 21.0 software. It is found that students’ effectiveness of college English learning is not very high. Female students have higher effectiveness than male ones, and students from town have higher effectiveness than that from countryside, and English level significantly influence effectiveness of college English online learning. Students prefer combined teaching way of teacher’s recorded materials and live broadcasting. Most students learn English for exams with unsatisfactory college English autonomous learning ability and self-efficacy. It can be concluded that students’ gender, origin and English language levels are major affecting factors of English online learning effectiveness. Countermeasures are to improve students’ sense of self-efficacy, to cultivate their online learning self-discipline, self-learning ability to promote college English online learning quality.

Keywords: College English, online Learning, learning effectiveness, college freshmen

1. INTRODUCTION

Higher education is one critical phase for college students to cultivate and improve their comprehensive competence of listening, speaking, reading, writing and translation. Learning effectiveness means that after a period of learning, the language learner makes progress in language competence. College English learning effectiveness means that college students make progress in their language competence such as listening, speaking, reading, writing and translation after a certain time of language learning. Learning effectiveness has been the research focus of Chinese experts. YIN Chao (2007), ZHANG Zhi-gang & SUN Yan-yan (2014) pointed out that the cooperative learning in college English teaching showed the tendency of low efficiency and formalization, then analysed the affecting factors [1][2]. LEI Meng (2015) found that team cooperative learning could improve students’ oral English in short term, and improve their comprehensive language competence in long term [3]. CUI Hong-mei, LU Chunlin (2016) applied the flipped classroom teaching mode to improve the effectiveness of teaching in higher vocational college based on their previous investigation [4]. RUAN Xiao-wen, YI Hua (2017) explored the roles of small-class based on teaching of improving the efficiency of English learning with the findings that small-class teaching could effectively improve students’ learning interest in English, promote their language comprehensive competence and enhance their cooperative awareness and cooperative ability [5]. XING Linyan (2013) found that learning strategy is a decisive factor for students’ self-study, and teacher is expected to cultivate students’ self-study ability [6]. CHENG Ming-hui(2019) explored the path of improving the effectiveness of college students’ English teaching in the intelligent learning environment, so the students can get the real learning experience and establish the consciousness of autonomous learning [7].

From above literature review, it can be concluded that much attention was attached to research of the learning effectiveness of team cooperation in college English learning, intelligent learning, blended English learning while little attention was attached to online college English learning effectiveness. Especially after the sudden breakout of COVID-19, all the colleges and universities carried out college English online teaching nearly for a whole semester, which is the first time for college students around the country to learn English online for so long period, the effectiveness of college students’ English online learning is increasingly urgent and concerned. A questionnaire was done among 1047 freshmen from colleges and universities to investigate the status quo of college English online learning effectiveness so that certain countermeasures were put forward based on the survey to improve college students’ English online learning effectiveness and to prepare for future combined college English teaching of online teaching and offline teaching.
2. RESEARCH OBJECTS AND METHODS

The questionnaire was designed by the author with 25 items. The first five items are about students’ personal information such as the college or university, gender, origin, English score in national college entrance examination, and students’ assessment of their online English learning effectiveness. The rest of questionnaire is divided into several aspects including learning behaviour, learning attitude, learning purpose, autonomous learning ability, etc. The credibility and validity of the questionnaire were tested with the result that Cronbach’s Alpha is 0.883, and Meyer-Olkin is higher than 0.5, thereby the questionnaire is suitable for the survey. A total of 1047 questionnaires were issued and 1043 valid questionnaires were recovered with 99.62% recovery rate. The valid objects of study are 1043 freshmen from 42 various types of colleges and universities around the country, with 400 male, 643 female respectively 38.4% and 61.6%. SPSS 21.0 software was applied to statistically analyse the data. Independent variables entered the model at a level of 0.05, excluded standard was at 0.10 and testing standard was at a level of 0.05.

3. RESULTS OF THE STUDY

3.1. The status quo of the effectiveness of college English online learning

In order to clearly investigate overall status quo of the effectiveness of college English online learning, subjects were required to give a score which can quantitatively assess their state of college English online learning. The total score is 100. Table 1 shows the lowest point is zero while the highest score is 99, and average score is (62.64±16.453), which suggests that students’ effectiveness of college English online learning is not so satisfactory because students likely exaggerate their own effectiveness, the real effectiveness of college English online learning should be lower than the result. Question 8 supports the students’ self-evaluation of the effectiveness of college English online learning (see Table 2). Table 2 shows that only 26.2% of the students think that college online learning is effective with the average score of 3.17, which should acquire teachers and related students’ administrative departments to pay much attention to it. The majority of the students get used to traditional classroom English teaching in which students can get encouragement from teacher’s eye contract, body language and words when faced with problems and aren’t familiar with online English teaching, the effectiveness is not very high.

### Table 1. Overall status quo of the effectiveness of college English online learning

| Overall status quo of the effectiveness | N     | The Lowest score | The Highest score | Mean | Std. Deviation |
|----------------------------------------|-------|------------------|-------------------|------|---------------|
| Overall status quo of the effectiveness | 1043  | 0                | 99                | 62.64| 16.453        |

### Table 2. Students’ choice of effectiveness of college English online learning

| Effectiveness of college English online learning | Number | Percentage (%) |
|-------------------------------------------------|--------|----------------|
| Very effective                                  | 27     | 2.6            |
| Most effective                                  | 246    | 23.6           |
| Not sure                                        | 337    | 32.3           |
| Less effective                                  | 388    | 37.2           |
| Not effective                                   | 45     | 4.3            |
| Total                                           | 1043   | 100            |

3.2. The affecting factors of status quo of the effectiveness of college English online learning

To explore the affecting factors of status quo of the effectiveness of college English online learning, independent sample tests between gender and status quo as well as origin and status quo were done. Table 3 and Table 4 indicts that female students have higher effectiveness of college English online learning than male ones with respective average quos of (64.44±15.014)(61.35±18.481) and with statistical difference. Generally speaking, female students are good at language learning with good learning habit and with good self-control, so their effectiveness is higher than that of male students.

### Table 3. Gender difference between students’ effectiveness in college English online learning

| Gender  | N     | Mean  | Std. Deviation |
|---------|-------|-------|----------------|
| status quo of the effectiveness |       |       |                |
| female  | 643   | 64.44 | 15.014         |
| male    | 400   | 61.35 | 18.481         |
Table 4. Independent sample test of gender difference of students’ effectiveness of college English online learning

|                     | Levene’s Test for Equality of Variances | t-test for Equality of Means |
|---------------------|----------------------------------------|-----------------------------|
|                     | F | Sig. | t  | df. | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95%Confidence Interval of the Difference |
| Equal variances assumed | 8.064 | 0.005 | -1.998 | 1041 | 0.046 | -2.090 | 1.046 | -4.143 -0.037 |
| Equal variances not assumed | -1. 905 | 718.68 | 0.047* | -2.090 | 1.097 | -4.245 | 0.064 |

*P <0.05

Table 5 and Table 6 indicts that students from town have higher effectiveness of college English online learning than those from countryside with respective average quos of (64.51±16.702), (61.05±16.084) and with statistical difference. It’s well known that students from town have easy and stable access to Internet, which is basic for college English online learning, than those from countryside. And in the countryside, the life pace does not match teaching timetable well that hinders college English online learning in some degree.

Table 5. Origin difference of students' effectiveness of college English online learning

| Origin status quo of the effectiveness | N | Mean | Std. Deviation |
|----------------------------------------|---|------|----------------|
| countryside                            | 565 | 61.05 | 16.084 |
| town                                   | 478 | 64.51 | 16.702 |

Table 6. Independent sample test of origin difference of students' effectiveness of college English online learning

|                     | Levene’s Test for Equality of Variances | t-test for equality of Means |
|---------------------|----------------------------------------|-----------------------------|
|                     | F | Sig. | t  | df. | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95%Confidence Interval of the Difference |
| Equal variances assumed | 1.106 | .293 | -3.401 | 1041 | .001** | -3.459 | 1.017 | -5.459 -1.463 |
| Equal variances not assumed | -3.390 | 998.998 | .001 | -3.459 | 1.021 | -5.462 | -1.457 |

**P <0.01

To explore whether students’ effectiveness of college English online learning is correlated with their English level, students’ English score of college entrance examination is applied in the analysis. Table 7 indicates that students’ effectiveness of college English online learning is correlated with their English level with statistical difference. It’s universally acknowledged that the higher English level, the easier to understand English. So the students with high English level can learn the course better and easier, so they have higher effectiveness.

Table 7. Correlations between English level and students’ effectiveness of college English online learning

| Status quo of the effectiveness | English Level |
|--------------------------------|--------------|
| Pearson Correlation | 1 | .193 |
| Sig. (2-tailed) | 1043 | .000** |
| N | 1043 |
| Pearson Correlation | .193 | 1 |
| Sig. (2-tailed) | 1043 | .000** |
| N | 1043 |

**P <0.01
3.3. Students’ learning behaviour

The survey result of students’ learning behaviour is in Table 8. Table 8 reflects that most students don’t do well in college English online learning with an average of (3.6±0.916). For the exercises in online learning, 757 students (72.6%) almost don’t do the exercises, and 154 students (14.8%) never do the exercises, which is an alarming phenomenon for language acquisition.

Table 8. Students’ learning behaviour of college English online learning

| Category          | Question Item | The Lowest Point | The Highest Point | Mean | Std. Deviation |
|-------------------|---------------|------------------|------------------|------|---------------|
| learning behavior | 6             | 1                | 5                | 3.27 | 1.047         |
|                   | 7             | 1                | 5                | 3.93 | 0.785         |
| Total             | 2             | 1                | 5                | 3.6  | 0.916         |

3.4. Students’ learning attitude towards college English online learning

The survey result of students’ attitude towards college English online learning is in Table 9. From Table 9, it is inferred that only 14.3% students like learning college English online while the majority of them don’t like it.

Table 9. Students’ attitude towards college English online learning

| Attitude                          | Number | Percentage (%) |
|-----------------------------------|--------|----------------|
| Students’ attitude towards college English online learning |         |                |
| Very love                         | 36     | 3.5            |
| Most love                         | 113    | 10.8           |
| Not sure                          | 506    | 48.5           |
| Less love                         | 309    | 29.6           |
| Not love                          | 79     | 7.6            |
| Total                             | 1043   | 100            |

3.5. Students’ preference for college English online teaching way

To learn about which online teaching way students prefer, students were required to make a choice (see Table 10). Table 10 shows 54.2% students prefer to learn by teacher’s recorded materials and live to broadcast, then 23.1% by teacher’s live broadcasting.

Table 10. Students’ preference of college English online teaching way

| Preference                                              | Number | Percentage (%) |
|---------------------------------------------------------|--------|----------------|
| Students’ preference of college English online teaching way |         |                |
| Learning by teacher’s PPT                               | 102    | 9.8            |
| Learning by teacher’s recorded materials                 | 52     | 5.0            |
| Learning by teacher’s recorded materials & live broadcasting | 565    | 54.2           |
| Learning by teacher’s live broadcasting                   | 241    | 23.1           |
| Others                                                  | 83     | 8.0            |
| Total                                                   | 1043   | 100            |

3.6. Students’ note-taking in college English online learning

Whether students take notes in college English online learning is reflected in Table 11. From Table 11, it can be concluded that most of the students likely take notes in the learning process.

Table 11. Students’ note-taking in college English online learning

| Note-taking in college English online learning | Number | Percentage (%) |
|------------------------------------------------|--------|----------------|
| Yes, by hand                                   | 386    | 37.0           |
| Yes, by computer                               | 75     | 7.2            |
| Occasionally                                   | 460    | 44.1           |
| No                                             | 112    | 11.7           |
| Total                                          | 1043   | 100            |
3.7. Students’ purpose for English learning

Table 12 shows students’ purpose to learn English which deeply influences students’ behaviour in English learning. From Table 12, it is easily concluded that the majority of students (55.6%) learn English for exams not because of their real love, which is called instrumental purpose. So we can understand why many students can hardly insist on learning English after they pass the exams.

Table 12. Students’ purpose of English learning

| Purpose                          | Number | Percentage (%) |
|----------------------------------|--------|----------------|
| Curriculum requirement           | 142    | 13.6           |
| Future job                       | 46     | 4.4            |
| CET-4/6 test                     | 480    | 46.0           |
| More skill                       | 240    | 23.0           |
| Postgraduate exam                | 100    | 9.6            |
| Language love                    | 25     | 2.4            |
| Enrichment of life               | 10     | 1.0            |
| **Total**                        | 1043   | 100            |

3.8. Students’ college English autonomous learning ability

Table 13 reflects students’ college English autonomous learning ability. Students’ average college English autonomous learning quo is \(3.345\pm0.870\), which is not satisfactory.

Table 13. Students’ college English autonomous learning ability

| Category                        | Question Item | The Lowest Point | The Highest Point | Mean  | Std. Deviation |
|---------------------------------|---------------|------------------|-------------------|-------|----------------|
| English autonomous learning ability | 13            | 1                | 5                 | 3.28  | .900           |
|                                  | 14            | 1                | 5                 | 3.27  | .834           |
|                                  | 15            | 1                | 5                 | 3.24  | .906           |
|                                  | 16            | 1                | 5                 | 3.28  | .867           |
|                                  | 17            | 1                | 5                 | 3.51  | .856           |
|                                  | 18            | 1                | 5                 | 3.49  | .855           |
| **Total**                        | 2             | 1                | 5                 | 3.345 | 0.870          |

3.9. Students’ self-efficacy in college English online learning

From Table 14, we can see students’ self-efficacy in college English online learning. Students have certain self-efficacy in college English online learning, but it also needs strengthening.

Table 14. Students’ self-efficacy in college English online learning

| Category                        | Question Item | The Lowest Point | The Highest Point | Mean  | Std. Deviation |
|---------------------------------|---------------|------------------|-------------------|-------|----------------|
| English autonomous learning ability | 19            | 1                | 5                 | 3.01  | .680           |
|                                  | 20            | 1                | 5                 | 2.72  | 1.010          |
|                                  | 21            | 1                | 5                 | 3.56  | .924           |
|                                  | 22            | 1                | 5                 | 3.74  | .928           |
|                                  | 23            | 1                | 5                 | 3.01  | 1.007          |
| **Total**                        | 2             | 1                | 5                 | 3.208 | 0.909          |

4. CONCLUSION

From the above survey and discussion, it can be inferred that students’ college English online learning is not so effective. Female students have a higher effectiveness of college English online learning than male ones, and the students from town are more effective in college English online learning than those from countryside, and the students with better English are also more effective than those with poor English in online learning. College students need to change their learning behaviour, improve their learning purpose, correct their learning motivation, and promote their autonomous learning ability and self-efficacy in college English online learning. Teachers should enrich teaching materials and teaching methods by combining recorded teaching materials with live broadcasting teaching, strengthen supervision over students’ online learning and provide them with guidance.
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