The application of Internet broadcast in College English Teaching

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Abstract. This paper expounds the characteristics of English broadcasting from the perspective of "Internet" and its application in college English teaching. Combined with its application in college English classroom, this paper puts forward a teaching mode of combining Internet English broadcasting with college English teaching in order to bring out the potential of the advantages of Internet English broadcasting in college English teaching and improve the effect of English teaching at colleges.

1. Introduction
With the arrival of the information age, television, newspapers, network and other media have developed rapidly. Due to its unique advantages of convenience, economy, timeliness, speed and other advantages, broadcast media are still the first choice to receive information. English broadcasting can not only spread the latest global news and current affairs, but also spread the local and cultural customs of other countries, which can promote students' skills of speaking and listening, writing and reading. The College English Teaching requirements also explicitly requires learners to understand the basic information of radio programs in English-speaking countries. Nowadays, the development and popularization of the Internet provides a broad development space for broadcasting, and English broadcasting has a more convenient way of application. Whether from the perspective of improving English skills or from the aspect of examination-oriented education, college English teachers should lay much stress on the combination of English broadcasting with college English teaching.

2. Characteristics of Internet English Broadcasting
In recent years, as Internet information has been exploding, various kinds of network listening channels and tools have emerged, and the broadcasting forms have changed rapidly.

2.1. Some English radio stations have established websites
Such as: China International Radio Broadcasting website: http://english.cri.cn/, Beijing foreign language Broadcasting website: http://www.netfm.com.cn www.am774.com, British Broadcasting Corporation website: http://bbc.com, VOA for English learning official website: http://learningenglish.Voanews.com/, VOA Special English official website: http://www.voanews.com, American Fawkes Broadcasting website: http://www.fox.com, American National Public Broadcasting website: http://www.npr.org/, Australian ABC English online radio station: http://www.abc.net.au/radionationa/, Canadian Broadcasting Company website: http://www.cbc.radio-canada.ca/ En/. These network broadcasting can be on demand and repeated online, which
fundamentally changes the traditional mode of broadcasting transmission, effectively solves the drawbacks of fixed period, unrepeatable information, no text reference of traditional English broadcast.

2.2. Some English Radio stations have developed App software
Users can download the Apps of some broadcasting stations via their smartphones, such as: VOA Special English App, VOA Standard English App, VOA News App, BBC News App, CNN News App, NPR News App, etc. At the same time, more and more Internet English broadcast App softwares are available, such as English Broadcast App, Tata English Radio App, Dragonfly FM App, Koala FM App, Excellent Listening FM App, etc. These Internet radios collect a range of English language stations, including standard English of VOA, special English of VOA, BBC News, CNN, NPR, CRI, AP News and so on, which support offline downloading and broadcasting. Through the Internet, users can choose radio stations anytime, anywhere to listen to English broadcasts, including thousands of domestic and foreign live radio stations with massive audio programs, which can provide online programs on demand with personalized customization to let users have much freedom they have never experienced.

2.3 Editing softwares and electronic players for audio and video have sprung up on the Internet
There are so many online editing softwares such as Adobe audition, Cool Edit Pro, Super Sound, After Effects, Smart Cutter, Wavosaur, Adobe Premiere Pro, Final Cut Pro, Sony vegas, Edius, "Audio Editing Specialist," “Hui Sheng Hui Ying”, “Love Editing,” Video Editing Specialist. " etc. At the same time, various kinds of electronic players are available, such as: mp3, mp4, iPod, smartphone, laptop, etc. They can be used to edit, save, carry and play English broadcast files in the form of audio or video downloaded on the Internet.

3. Literature Review of the Application and Research of Internet English Broadcasting in College English Teaching
Recently, domestic related studies have gradually increased from scratch. For example, Wang Jingzhi (2010) compared traditional English broadcasting with Internet English broadcasting, and pointed out the advantages of network broadcasting resources in college English teaching [1]. Lin Wanfeng and He Xiaoqing (2013) explored the specific methods of using VOA broadcast resources to assist students in learning English and put forward some suggestions on the practice of VOA broadcast teaching [2]. Hong Shisong (2013) takes the ordinary program of Voice of America as an example to explore the effective strategies of English broadcasting teaching with examples and relevant data [3]. Cheng Liang (2014) proposed the characteristics of broadcasting and its advantages in the new era of media, and pointed out that English broadcasting can effectively improve students’ various English skills [4]. Ren Lifeng (2016) introduced the English broadcast platform of Zhongshan Vocational and Technical College, through which students can obtain a large amount of comprehensible language input, so as to improve the practical use of English language [5].

It can be seen that due to Internet, English broadcasting has provided a broad extension space for college English classroom teaching, and some achievements have been made in domestic relevant theoretical research and practical exploration. It is of positive significance to promote the deep integration of English broadcasting and traditional college English classes.

4. The Application of Internet Broadcast in College English Teaching
According to the characteristics of Internet English broadcasting, we can try to apply broadcasting into college English teaching in order to give full play to its advantages in teaching. The class with this teaching mode has achieved better teaching effect in teaching practice.

4.1. Teaching subjects
4.1.1 The Test of teaching subjects. One-Way Anova is used to test and analyze the problem types. The specific process is as follows:
H0 : \( \mu_1 = \mu_2 = \mu_3 = \mu_4 \)
H1: \( \mu_1, \mu_2, \mu_3, \mu_4 \) are not equal.

Select test statistics:

\[
F = \frac{MSA}{MSE} = \frac{SSA/(k-1)}{SSE/(n-k)}
\]

The value F of the statistics is compared with \( F_\alpha \) (the critical value of \( \alpha \) with a given significance level) to make a decision on the original hypothesis \( H_0 \).

4.1.2. Teaching analysis of test results

The non-English majors were selected from 38 classes of in Changchun University of TCM and tested before applying broadcasting into teaching. Test questions include speaking, listening, reading, writing, and translation. Four classes with the same average scores on English tests were chosen as teaching objects. In order to test the students’ English proficiency in these four classes, SPSS 17.0 statistical software was used to carry out statistical analysis. There was no significant difference in the data (if \( P < 0.05 \), it has statistical significance. If \( P > 0.05 \), it has no statistical significance.). By using One-Way Anova to test each question type, we can see that the significance of each question type is 0.973 in oral English, 0.279 in listening, 0.053 in reading, 0.673 in writing and translation (1.000 is the total score, \( P > 0.05 \) in each question type). Consequently, there is no significant difference in pre-test scores among the four classes and the students’ English proficiency is the same, and the results showed in Table 1.

| Question Types       | Significance |
|----------------------|--------------|
| Oral English         | 0.973        |
| Listening            | 0.279        |
| Reading              | 0.053        |
| Writing and Translation | 0.673    |
| Total Score          | 1.000        |

4.2. Teaching Content and Methods

Four classes were randomly divided into two control classes and two experimental classes. The traditional teaching contents and methods were adopted in the two control classes. The Internet English broadcast learning groups were set up in the two experimental classes. The specific teaching contents and methods of the experimental class are as follows:

4.2.1 Pre-class.  (1) Arranging and recommending Internet English broadcast sites, English radio stations Apps and Internet radio Apps software to students; (2) Requiring each student to listen to Internet English broadcast flexibly according to his / her own time each day. According to "listening time", "listening channel", "brief content overview", "Internet broadcast language knowledge accumulation (words, phrases, sentence patterns, etc.)", "domestic and foreign Internet English broadcast content comparison" and other content modules to write listening report; (3) Requiring each group of students to refer to the content of the Internet English broadcast every week, to edit and record a broadcast, and each group member to play the role of announcer and journalist in turn, to film it into video and to make it into an Internet broadcast micro-lecture with questions in order to test the shorthand ability of other groups’ students.

4.2.2 In-class.  (1) Checking the completion of individual and group tasks before class; (2) Selecting excellent individuals and groups to display for 10 minutes, and asking students to watch the broadcast video carefully and answer the questions raised. (3) Explaining and correcting the problems in the videos taken by students.
4.2.3 **Class-break.** Using classroom Internet Multimedia equipment to play real time Internet English Broadcasting.

4.2.4 **After-class.** (1) Students are required to log into the class cloud and answer questions raised by other learning groups that are not shown in the classroom; (2) Internet English broadcasting community are set up to carry out regular community activities; (3) The English section program of campus English radio station are designed and the members of each group as broadcasters are selected; (4) The website of campus English radio station are established to push the real time broadcast in and out of school through the Internet; (5) Internet English broadcasting knowledge contests are organized; (6) The practical innovation project of college students were applied for with the help of Internet English broadcasting platform.

4.3. **The Evaluation of Teaching Effect**

4.3.1 **Evaluation method.** Descriptive statistics and metrological data are represented by mean value and standard deviation. If P<0.05, it has statistical significance in T experiment with two independent samples.

4.3.2 **Evaluation process.**

\[ X_1 \sim N(\mu_1, \sigma_1^2) \]
\[ X_2 \sim N(\mu_2, \sigma_2^2) \]
\[ X_1 - X_2 \sim N(\mu_1 - \mu_2, \sigma_{12}^2) \]

Establishment of original and alternative assumptions:

\[ H_0 : \mu_1 - \mu_2 = 0 \]
\[ H_1 : \mu_1 - \mu_2 \neq 0 \]

Selection of test statistics:

\[ t = \frac{(\bar{X}_1 - \bar{X}_2) - (\mu_1 - \mu_2)}{\sqrt{\sigma_{12}^2}} \]

When the two total variance is unknown and equal:

\[ \sigma_{12}^2 = \frac{S_p^2}{n_1} + \frac{S_p^2}{n_2} \]
\[ S_p^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 - n_2 - 2} \]
\[ t = \frac{(\bar{X}_1 - \bar{X}_2) - (\mu_1 - \mu_2)}{\sqrt{\sigma_{12}^2}} \]

When the two total variance is unknown and unequal:

\[ \sigma_{12}^2 = \frac{S_1^2}{n_1} + \frac{S_2^2}{n_2} \]
\[ t = \frac{(\bar{X}_1 - \bar{X}_2) - (\mu_1 - \mu_2)}{\sqrt{\sigma_{12}^2}} \sim t(df) \]
4.3.3 Evaluation result. According to the above specific content, three semesters’ teaching are conducted in the experimental class. The scores (post-test) data of four classes in CET4 were collected and collated, and SPSS 17.0 statistical software for statistical analysis was used. The mean ±standard deviation (x ±s) was used to express the test results of the groups (if P < 0.05, it has statistical significance).

\[
df = \frac{(S_1^2 + S_2^2)^2}{\frac{S_1^4}{n_1} + \frac{S_2^4}{n_2}}
\]

Table 2. The scores of the CET 4 (post-test) of the four classes

| Question Types       | Significance |
|----------------------|--------------|
| Listening            | 0.045        |
| Reading              | 0.000        |
| Writing and Translation | 0.001      |
| Total Score          | 0.000        |

Table 3. The result of the CET 4 scores (post-test) of the four classes

| Groups       | \(\bar{X}\) | S  |
|--------------|-------------|----|
| Experimental Group | 439.083     | 45.425 |
| Control Group     | 409.267     | 52.318 |

It can be seen that there are significant differences in English test scores (post-test) with different teaching modes. Although there is no oral question in the post-test, more students in the experimental class won the awards in the online oral competition. This study shows that the experimental class is significantly better than the control class in all aspects of academic performance. Students in experimental class are more interested in learning, and their learning efficiency is much better. The advantages of Internet English broadcasting applied in college English teaching are obvious: the context is real, students can really hear the content close to real life; the content is rich, students can have extensive contact with standard language in various fields such as politics, economy, science and technology, business, sports, entertainment, etc.; the language is changeable and students can gradually accumulate updated vocabulary in English broadcasting materials. Therefore, Internet English broadcasting has great advantages in training students’ listening, reading, writing and translation abilities. In addition, Internet English broadcasting also broadens students’ horizons, enables them to know more about global current affairs news, broadens the channels for students to participate in social life, improves their understanding and sensitivity to current affairs trends, exercises their analytical ability, cultivate their critical thinking and cross-cultural awareness and linguistic awareness.

5. Conclusion

In recent years, with the deepening of English teaching reform at colleges, English teaching model has aroused the research of Internet English resources in China. Internet English broadcasting is an important part of Internet English resources. College English teachers should lay emphasis on the teaching resources of Internet English broadcasting and combine it with the traditional classroom teaching of college English.
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