Strategies for cultivating professional competence of business English talents under the concept of CBI Teaching

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Abstract: In view of the poor effect of professional ability training of business English talents at present, this paper puts forward the professional ability training strategy of business English talents under the CBI teaching concept, standardizes the professional ability evaluation algorithm of business English talents and optimizes the professional ability training mode of English talents by combining the business English talent teaching mode under the CBI teaching concept. Finally, it is confirmed by experiments, Under the CBI teaching concept, the practical effect of business English talent professional ability training strategy is obvious, which can better improve the business English teaching effect and promote the quality of English talent training.

Keywords: CBI teaching; Business English; Personnel training; English ability

1. Introduction

With the deepening and development of economic globalization, in 2007, the Ministry of Education officially approved the establishment of business English majors in response to the demand for international business talents from economic development. As of 2016, 293 colleges and universities across the country have offered business English majors. In the second half of 2013, experts from the Ministry of Education's College Business English Major Teaching Collaboration Group formulated the "National Standards for Undergraduate Teaching Quality of Business English Majors in Colleges and Universities" (hereinafter referred to as the "Business English Standard"). "Business English Standard" is the basis for the admission, construction and evaluation of business English undergraduate majors, and has important guiding significance for the construction of business English majors in colleges and universities across the country. With the development of the times, domestic English teaching models are constantly innovating, such as ESP, immersion teaching, bilingual teaching and so on. These teaching models are based on CBI teaching model.

2. Strategies for cultivating professional competence of business English talents

2.1. An algorithm for evaluating the competence of English Majors

Assumed target variable γ It has a linear relationship with multiple variables $\beta_1, \beta_2,..., X^\beta_K$. and $X_1, X_2,..., X_K$ can be calculated by linear function, which is called multiple linear regression model. The form of its equations is

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_K X_K + \mu$$

(1)

Where $y$ is the target variable, $X_1, X_2,..., X_K$ are variables, $\beta_k = 1,2,..., K$ are $K + 1$ Parameters to be solved, $\mu$ is a random error term. The linear equation between the expected value of target variable $y$ and variables $X_1, X_2,..., X_K$ is the overall regression equation[1-2]. Its equations are:

$$E(Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_k X_k$$

(2)

For $n$ groups of observations $X_1, X_2,..., X_K, y (i = 1,2,..., n)$, the equation group form is:
\[ Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \cdots + \beta_k X_{ik} + \mu_i, \quad (i = 1, 2, \cdots, n) \]  

(3)

Its matrix form is:

\[
\begin{bmatrix}
Y_1 \\
Y_2 \\
\vdots \\
Y_n \\
\end{bmatrix} =
\begin{bmatrix}
1 & X_{11} & X_{12} & \cdots & X_{1m} \\
1 & X_{21} & X_{22} & \cdots & X_{2m} \\
\vdots & \vdots & \vdots & \ddots & \vdots \\
1 & X_{n1} & X_{n2} & \cdots & X_{nm} \\
\end{bmatrix}
\begin{bmatrix}
\beta_0 \\
\beta_1 \\
\vdots \\
\beta_k \\
\end{bmatrix} +
\begin{bmatrix}
\mu_1 \\
\mu_2 \\
\vdots \\
\mu_n \\
\end{bmatrix} 
\]  

(4)

Where \( Y \) is the observation matrix vector, \( X_{KN} \) is the observation matrix vector of variables \( X_1, X_2, \ldots, X_K \), and \( \beta_k \) is the regression coefficient matrix vector, \( \mu_n \) is the matrix vector of random error term. Therefore, the regression coefficient in the model is partial regression coefficient, which can also be said that when other variables are fixed [3], you can check the influence of one of them on the target variable \( y \). Due to parameters \( \beta_j (j = 0, 1, 2, \cdots, k) \) are unknown and can be used \( X_{i1}, X_{i2}, \cdots, X_{ik}, Y(=1, 2, \ldots, n) \) estimate them. It is assumed that after calculation, the obtained parameter estimation can be expressed as \( \hat{\beta}_j (j = 0, 1, 2, \cdots, k) \). Then \( G = (1, 2, \ldots, K) \) can be used to replace the parameter \( 6 / (= 0,12,\ldots, K) \) in the above regression equation, then the multivariate linear sample regression equation:

\[
\hat{\beta}_j (j = 0, 1, 2, \cdots, k) 
\]  

(5)

The residual \( e_i \) is the difference between the estimated value of the target variable obtained from the multiple linear sample regression equation and the real value \( y \). The equation form of residual \( e \) is defined as

\[
e_i = Y_i - \hat{Y}_i = Y_i - \left( \hat{\beta}_0 + \hat{\beta}_1 X_{i1} + \hat{\beta}_2 X_{i2} + \cdots + \hat{\beta}_k X_{ik} \right) 
\]  

(6)

Diagnostic evaluation model is a dynamic evaluation model for learners to diagnose learning disabilities, evaluate learning conditions, adjust learning methods and warn learning states [3].

2.2. Realization of business English professional ability training

System theory holds that all things have structures and are the aggregation of various factors, which are interrelated and interact with each other; Some small systems form a larger system, and some larger systems are connected to each other to form a larger system [4]. For example, business English teaching is regarded by the author as a subsystem formed by the interaction of many factors, and multiple subsystems cross to form a large system, which can be summarized as figure 1.

![Figure 1: Business English talent training and teaching system](image-url)
CBI outline covers the scientific knowledge, ability and literacy that a modern engineer should have. The outstanding feature of CBI outline lies in its detail and operability, which has strong guiding and reference significance. Learning state evaluation algorithm mainly calculates learners' mastery of knowledge point type and learners' attention coefficient, determines learners' learning type, and provides targeted guidance for learners[5]. The element $X$ in the matrix represents the scoring rate $J$ of the $ith$ learner. The formula of the matrix is as follows:

$$
\begin{bmatrix}
X_{i1} & X_{i2} & \cdots & X_{im} \\
X_{21} & X_{22} & \cdots & X_{2m} \\
\vdots & \vdots & \ddots & \vdots \\
X_{ni1} & X_{n1} & \cdots & X_{num}
\end{bmatrix}
$$

(7)

The learning state evaluation algorithm can only process the binary metadata, and the score rates of knowledge points and question types are distributed in $[0,1]$ is the decimal point in the interval, so these data need to be processed. If it is greater than or equal to the threshold, it is judged to master and marked as $1$, otherwise it is not mastered and marked as $0$. The judgment formula is as follows.

$$
\text{Line}(x_{ij}) = \begin{cases} \\
0, & x < \frac{\sum_{i=1}^{n} x_{ij}}{n} \\
1, & x \geq \frac{\sum_{i=1}^{n} x_{ij}}{n}
\end{cases}
$$

(8)

Let $X$ be the scoring rate of the $i$-th learner's $j$-type knowledge point, then the sum of the scores of learner $I$ and the number of correct answers of Knowledge-type $j$ is $X$. Formula such as

$$
\begin{align*}
X_i &= \sum_{j=1}^{m} x_{ij} \\
X_j &= \sum_{i=1}^{n} x_{ij}
\end{align*}
$$

(9)

In teaching practice, teaching materials integrating language knowledge and subject content are one of the decisive factors for the implementation effect of CBI teaching mode. The content of the English education model is shown in Table 1.

<table>
<thead>
<tr>
<th>Subject content input</th>
<th>Learn 2 readings on nanotechnology; Look up the scientific terms from the text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text content analysis</td>
<td>Discourse structure model: the macro structure of academic discourse</td>
</tr>
<tr>
<td></td>
<td>Functional analysis of academic discourse Title: writing background; method; result; discuss</td>
</tr>
<tr>
<td></td>
<td>Analysis of stylistic features of academic discourse: word use, tense, voice, common sentence patterns and word selection</td>
</tr>
<tr>
<td>After class writing and development training</td>
<td>Text abbreviation: condense the main points of the text; Academic lectures; Watch videos and discuss</td>
</tr>
</tbody>
</table>

Practice and management. This education model breaks through the organized process in which teachers control teaching content and teaching progress in strict accordance with the syllabus, and fully considers the self-organization and knowledge exchange of the teaching system. The CBI teaching model is constructed as Figure 2.
CBI teaching mode is that under a certain teaching environment, teachers, in a suitable teaching environment, students obtain knowledge from teaching content, and students' needs promote the renewal of teaching content. Therefore, under the CBI model, we should take reasonable reform on the College English curriculum, guide students to choose reasonable topics as much as possible, let students deeply understand the essence of the target language, have a solid cultural foundation, recognize different cultural backgrounds, and cultivate students into a new generation of cross-cultural communication talents.

3. Analysis of experimental results

Educational evaluation is a process of making factual judgment on a certain aspect of education according to certain standards and assigning values: highlighting values and paying full attention to the analysis and evaluation of problems. Teaching evaluation is the process of studying the value of teachers' teaching and students' learning. Students' perceptions of the deficiencies in teachers' professional competence are shown in Figure 3.

Teachers and students understand the talent training objectives. This study investigates the understanding of College English majors and teachers on the types of talent training objectives through a questionnaire, that is, "Q7: what do you think the talent training objectives of this major should be" in the teacher's volume and the needs of students "Q: you think the talent training goal of this major should be. Through the analysis of the data, it is known that the talent training goal of English majors understood by teachers and students is relatively consistent. 53.3% of teachers and 56.76% of students believe that the talent training goal of English majors should be compound and applied talents. Among teachers, the talent training goal should be the proportion of English professionals and applied teachers All of them are 20%, and the proportion of teachers selecting talents with compound training goal is the
least, only 6.67%. Among the students, 17.57% think that the talent training goal should be English professionals, the proportion of students selecting applied talents is 13.51%, and the proportion of students with compound talents is the least, which is 12.61%. The talent training goals given by colleges and universities in the figure are extremely inconsistent, which also shows the official talent training goal of colleges and universities. The standard is not consistent with the demands of teachers and students, which should be paid attention to Figure 4. The overall evaluation of professional teachers majoring in English majors is shown in Table 2.

Figure 4: Types of talent training objectives understood by teachers and students

The overall evaluation of English majors on their teachers is investigated, as shown in the table 2.

Table 2: Overall evaluation of English majors on their professional teachers

<table>
<thead>
<tr>
<th>Evaluation items</th>
<th>very nice</th>
<th>preferably</th>
<th>commonly</th>
<th>Poor</th>
<th>Very bad</th>
<th>population</th>
</tr>
</thead>
<tbody>
<tr>
<td>academic level</td>
<td>16.33%</td>
<td>43.92%</td>
<td>35.02%</td>
<td>2.6%</td>
<td>2.13%</td>
<td>100%</td>
</tr>
<tr>
<td>Oral level</td>
<td>16.88%</td>
<td>38.50%</td>
<td>33.79%</td>
<td>8.11%</td>
<td>2.72%</td>
<td>100%</td>
</tr>
<tr>
<td>knowledge structure</td>
<td>18.25%</td>
<td>41.88%</td>
<td>31.75%</td>
<td>6.09%</td>
<td>2.03%</td>
<td>100%</td>
</tr>
<tr>
<td>Professionalism</td>
<td>33.77%</td>
<td>41.23%</td>
<td>18.91%</td>
<td>4.73%</td>
<td>1.36%</td>
<td>100%</td>
</tr>
<tr>
<td>Preaching and educating people</td>
<td>31.09%</td>
<td>39.18%</td>
<td>23.66%</td>
<td>4.05%</td>
<td>2.02%</td>
<td>100%</td>
</tr>
<tr>
<td>teaching method</td>
<td>13.52%</td>
<td>41.21%</td>
<td>34.45%</td>
<td>9.47%</td>
<td>1.35%</td>
<td>100%</td>
</tr>
<tr>
<td>Teaching quality</td>
<td>14.88%</td>
<td>35.80%</td>
<td>39.18%</td>
<td>8.12%</td>
<td>2.02%</td>
<td>100%</td>
</tr>
</tbody>
</table>

This paper investigates the evaluation of teachers and graduates on the overall quality of English majors, as shown in the figure 5.

Figure 5: Teachers’ and graduates’ evaluation of the overall quality of English Majors
More than half of the teachers give it a "general" evaluation, and the evaluation of graduates is higher than that of teachers. This study also investigates the evaluation of teachers and graduates on the qualities of English majors. Teachers affirmed students' "learning ability" and "computer level", and the proportion of teachers holding positive attitude was 62.71% and 83.25% respectively. Teachers' evaluation of students' "innovative ability" and "practical ability" is low, and the proportion of teachers' negative attitude is 27.67% and 23.38% respectively.

4. Conclusion

In the experiential intercultural communicative competence training model under the CBI paradigm, the project is the support and carrier, and the experience is the necessary means. This teaching model combines language learning with cultural experience, meets the training goal of jointly improving the knowledge elements, skill elements, strategy elements and emotional elements of intercultural communicative competence, and highlights the cultivation of emotional elements and skill elements, Enable students to develop cross-cultural awareness and exercise cross-cultural skills on the basis of obtaining cross-cultural knowledge.

Acknowledgments

A study on the current situation and strategies of “Chinese Cultural Aphasia” in the teaching of business English in Jiangxi Province (JC20248)

References