Research on the Teaching Reform of Civil and Commercial Law Course in Colleges Based on the Fuzzy Evaluation Model

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Abstract

The teaching of civil and commercial law course in colleges is not only vocational education for college students, but also an important content of quality-oriented education. College students accepting the education on law popularization, can not only strengthen their own legal knowledge structure, but also meet the requirements of age for law-based governance. Students cultured by contemporary higher education should have good basic legal knowledge and good practice ability. Especially for those who are majored in economic management, studying the civil and commercial law is their future career demand. However, China's civil and commercial law education in colleges at the present stage has many drawbacks, such as relatively single course content, no realization of effective interaction between teachers and students in the class, unreasonable current course assessment system, etc., which is not conducive to the development of law education to a certain extent. Based on this, this paper analyzes the existing problems of China's civil and commercial law course in colleges in detail, and uses the fuzzy evaluation model (AHP) to explore the teaching reform in colleges. According to the research results, relevant reform proposals are put forward to promote the reform of teaching concept and teaching mode of education in the civil and commercial law of colleges, so as to fully adapt to the construction of law-based governance in contemporary China.

Keywords: AHP Model, College, Civil and Commercial Law, Course Teaching, Reform.

1. RESEARCH BACKGROUND

1.1 Literature review

Colleges are important places to cultivate high-quality comprehensive talents, and in order to promote the implementation of law-based governance in China, colleges should attach importance to the cultivation of students' legal quality. In the cultivation of legal system awareness and legal quality of college students, the basic law course in the "two courses" plays a vital role (Lv and Lv, 2005). At present, China's law education in colleges is undergoing comprehensive reform, especially the reform of teaching methods, which has become one of the key subjects of many colleges. Although relatively advanced methods of education from the United Kingdom and the United States are introduced for establishment of the law education in China, there are still some problems, such as passive learning and poor combination with practice. So, the mechanical copying of foreign education methods is not the main way to improve the law education in China (Liu and Hu, 2009). In the civil law education course at German colleges, it focuses on the cultivation of students' practical operation ability from compiling of teaching materials, teaching methods, course type and course setting. The civil law education in China's colleges should learn from the teaching ideas of German colleges, detail the course setting of the civil and commercial law, attach importance to the case analysis, and carry out the discussion-based teaching, so as to cultivate students' ability of solving problems (Wang and Chou, 2012). Case teaching method has the advantages of flexibility and diversity. Case teaching method should be adopted in civil and commercial law teaching, dominated by case teaching, and assisted by lecture teaching. By strengthening the good interaction between teachers and students, the students can improve their ability of linking theory with practice, and cultivate their legal thinking and legal professional competence (Li and Meng, 2013). The "flipped" teaching method is also the main direction of reform and innovation of teaching model in recent years, which changes the position of teachers and students in traditional teaching, and uses the network resources of "course center" to enable students to actively carry out professional studies (Chen and Cao, 2017).
1.2 Research purpose

The law education in China at the present stage is constantly developing and improving. By learning the advanced education teaching ideas and methods, the shortcomings of teaching model can be improved and adjusted in all-around way to realize the teaching goal of cultivating law professionals. As the first institution to establish the teaching and research of civil law since the foundation of China, Civil Law Teaching and Research Office for Department of Law, People's University (now called Civil and Commercial Law Teaching and Research Office) has had a history for nearly seventy years, and has been devoted to the construction and improvement of China's civil and commercial law theory (Wang and Yao, 2010). Northwest University of Politics and Law is also one of the earliest higher politics and law institutions, which has established characteristic demonstration courses by building the provincial-level high-quality civil law courses, including building of first-class teaching staff, first-class teaching content, first-class teaching materials, first-class teaching methods, etc. (Li and Han, 2010). So the teaching team of colleges is the backbone of improving course quality and cultivating talents. Therefore, the reform of civil and commercial law course in colleges should improve teachers' professional quality and cultivate their teaching ability (Wang and Sun, 2014). In the reform of the teaching model of civil and commercial law, the financial colleges have their own unique characteristics, and they should change the traditional "duck-stuffing type" teaching model, and combine innovative curriculum system to implement case-based teaching, extracurricular BBS and other diversified teaching models, so as to realize continuous development and perfection of the civil law teaching model (Hu and Ji, 2011). Based on the above research theory, this paper further studies the reform of course teaching of civil and commercial law in colleges in order to promote the reform and innovation of education model in colleges, and it is also beneficial to the overall improvement of the legal quality of college talents.

2. MAIN PROBLEMS IN THE CLASSROOM TEACHING OF CIVIL AND COMMERCIAL LAW

The traditional law education in China relies more on imparting theoretical knowledge of law, but rarely combines with the actual needs of the society, which often makes students only master the theoretical knowledge, but have difficulties to apply to practice after receiving education. Especially the civil and commercial law that combines with civil law and commercial law is quite difficult for the students to understand and apply into practice flexibly. However, the objective of talents training of law major in colleges requires that students shall have a solid theoretical foundation and strong practical skills (Liu and Jia, 2013). Moreover, with the development of China's economy, there will be stricter requirements on the legal talents required by society, and they must have profound theoretical foundation and excellent practice skills. However, the civil and commercial law teaching in China at the present stage cannot meet the social needs and talents training objectives, and it mainly has the following problems:

2.1 Single course content, and unreasonable overall course setting

It is difficult to fully understand the law theory when college students are directly confronted with the abstract law theory in the process of studying. From the perspective of course content setting, for most of the civil and commercial law course in colleges, the main content is the subject of law, and the aim of setting up the course is only to impart knowledge, without effective combination theory knowledge and professional skills. In terms of the teaching content, the content imparted by the teacher in the classroom focuses on the system and content theory of the civil and commercial law, and focuses on getting students to learn and master the overall system and knowledge structure. However, as there is little significance in interpreting legal texts in society, and students have less relevant practical experience, this makes them often have theoretical knowledge, but have difficulty in solving the actual confusion and problems.

2.2 Traditional teaching model, failure in realization of effective interaction between teachers and students in the class

The classroom teaching of civil and commercial law in colleges often adopts the one-way and closed traditional teaching model, without realizing the effective interaction between teachers and students. During the class, teachers only carry on a single teaching, and rarely ask questions to students, while students also maintain the mechanical learning state, and rarely ask questions to teachers (Chen et al., 2005). This phenomenon causes that most of the students do not talk to and communicate with the teachers after completion of the whole course. When evaluating students, teachers can only rely on test scores instead of students' independent thinking ability. In this traditional teaching model, teachers are unable to obtain truthful and effective feedback of teaching information, and students tend to have passive and negative learning state.
2.3 Unreasonable existing course assessment system that limited to the theory education level

The education of civil and commercial law requires that teachers should teach the students some legal knowledge, and teach the students how to realize the combination of legal provision and social reality, so that students can be trained to have the ability to solve practical cases. However, the education of civil and commercial law in many colleges only stay at the level of knowledge, and fails to realize the sublimation from educational theory to educational practice, so that students do not gain an accurate understanding of civil and commercial law. If the education of civil and commercial law in colleges always stays at the theoretical education level, the civil and commercial law course will eventually become useless. Moreover, the existing course assessment system of colleges is not very reasonable, and the assessment on civil and commercial law courses is based on written test scores, without fully combining practice scores (Zhou et al., 2011). The students' academic performance is assessed only by scores, paying no attention to students' classroom performance may easily dispel students' learning interest and enthusiasm, and has some disadvantages.

3. ESTABLISHMENT OF EVALUATION SYSTEM

3.1 Establishment of hierarchical structure for teaching assessment system

Firstly, the hierarchical processing index is mainly divided into three levels, namely target level, criterion level and scheme level (Liu and Meng, 2008). The ultimate goal is to achieve students' evaluation on the teaching effect of civil and commercial law courses, and such goal is taken as the target level. The criterion level represents the criterion for determination, mainly including teaching method, represented by \( A_1 \), teaching content, represented by \( A_2 \), teaching attitude, represented by \( A_3 \), and teaching result, represented by \( A_4 \). A specific scheme should be implemented for each criterion, namely the scheme level, mainly including 9 indexes, represented by \( B_1 \) to \( B_9 \).

3.2 Construction of comparison judgment matrix

The degree of influence of \( A_n \) and \( A_m \) on upper targets defined in this paper is expressed by matrix \( a_{nm} \), and the value of \( a_{nm} \) is shown in Table 1.

<table>
<thead>
<tr>
<th>( a_{nm} )</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>( A_n ) and ( A_m ) are equivalent</td>
</tr>
<tr>
<td>3</td>
<td>Comparison of ( A_n ) and ( A_m ), ( A_n ) is slightly important</td>
</tr>
<tr>
<td>5</td>
<td>Comparison of ( A_n ) and ( A_m ), ( A_n ) is relatively important</td>
</tr>
<tr>
<td>7</td>
<td>Comparison of ( A_n ) and ( A_m ), ( A_n ) is extremely important</td>
</tr>
<tr>
<td>9</td>
<td>Comparison of ( A_n ) and ( A_m ), ( A_n ) is mostly important</td>
</tr>
</tbody>
</table>

3.3 Collection and calculation of sample data

In order to verify the actual effect of the reform in teaching civil and commercial law course, a questionnaire survey on students of law major of a college is carried out. In this survey, 50 students get involved, and through statistics of the questionnaire results, the cognition of students on importance of teaching methods, teaching contents, teaching attitude and teaching results is obtained. The specific results are:

\[
a_{12}=1:2, \ a_{13}=1:1, \ a_{14}=1:4, \ a_{23}=3:1, \ a_{24}=1:3, \ a_{34}=1:4
\]

3.4 Single hierarchical arrangement and its consistency check

In MATLAB 2015 software, the maximum eigenvalue of the matrix is obtained: \( \lambda_{max}=4.0617 \), and then the analytical study on the consistency of the index is carried out quantitatively, the following expression can be obtained:

\[
CI=(\lambda-\alpha)/(n-1)
\]
3.5 Determination on the weights of evaluation factors

Based on statistical analysis of evaluation factors for teaching reform in the civil and commercial law course, and the consideration of college’s management layer on each evaluation factor, the weight vector of each evaluation factor should be solved. The relative importance of one of the evaluation factors is called as the weight. According to the general specification, each weight \( w_i \) should meet the following conditions:

\[
\sum_{i=1}^{n} w_i = 1, w_i > 0, w_i \in [0, 1]
\]  

(3)

After normalization, the weights of evaluation factors are obtained, respectively: \( A_1: 0.1183 \), \( A_2: 0.2421 \), \( A_3: 0.1076 \), \( A_4: 0.5320 \).

4. ESTABLISHMENT OF FUZZY COMPREHENSIVE EVALUATION MODEL

4.1 Construction of evaluation matrix

According to the collected data about students’ evaluation, the grade of membership of each evaluation factor in the evaluation factor set can be determined. By placing all the evaluation results of the students into the matrix, the fuzzy matrix is obtained. The membership grade of evaluation factor \( U_i \) to evaluation set \( U_j \) is \( U_{ij} \), and then the following can be obtained:

\[
U = \begin{bmatrix}
U_{11}, U_{12}, U_{13}, U_{14}, U_{15} \\
U_{21}, U_{22}, U_{23}, U_{24}, U_{25} \\
\vdots & \vdots & \vdots & \vdots & \vdots \\
U_{m1}, U_{m2}, U_{m3}, U_{m4}, U_{m5}
\end{bmatrix}
\]  

(4)

After normalization, the weight vector of the secondary index is \( B=0.1 \). Based on the statistical results of the questionnaire, an evaluation matrix on the reform of civil and commercial law courses is constructed, as shown in Table 2.

Table 2 Calculation of Evaluation Results

<table>
<thead>
<tr>
<th>Primary index</th>
<th>Secondary index</th>
<th>Very good</th>
<th>Relatively good</th>
<th>Acceptable</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching method ( A_1 )</td>
<td>( B_1 )</td>
<td>19</td>
<td>17</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>( B_2 )</td>
<td>26</td>
<td>13</td>
<td>7</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Teaching content ( A_2 )</td>
<td>( B_3 )</td>
<td>19</td>
<td>19</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>( B_4 )</td>
<td>17</td>
<td>23</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Teaching attitude ( A_3 )</td>
<td>( B_5 )</td>
<td>37</td>
<td>11</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>( B_6 )</td>
<td>22</td>
<td>18</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>( B_7 )</td>
<td>19</td>
<td>22</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Teaching result ( A_4 )</td>
<td>( B_8 )</td>
<td>12</td>
<td>25</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>( B_9 )</td>
<td>15</td>
<td>19</td>
<td>13</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

4.2 Fuzzy evaluation conclusion

According to the fuzzy evaluation set \( O=(o_1, o_2, \ldots, o_n) \), and the principle of maximum membership grade, the membership grade of the fuzzy evaluation set is represented by \( o_\mu \), the evaluation result is represented by \( M \), and the following can be obtained:

\[
M=\max(o_1, o_2, \ldots, o_n)
\]  

(5)

Based on the evaluation results in Table 2, the final evaluation score of evaluation factors for the effect of course teaching reform of civil and commercial law is obtained:

\[
A_1=82, A_2=86, A_3=84, A_4=81
\]  

(6)
According to the fuzzy evaluation set, the comprehensive evaluation result is obtained \( M=83.25 \), and is converted to 8.32 score under ten-point system. It can be seen that the reform in civil and commercial law courses in the university has a good effect.

5. CONCLUSION AND SUGGESTION

In view of some problems emerging in the course of civil and commercial law in colleges at present, colleges should pay more attention to them and should reform and adjust accordingly. During the classroom teaching of civil and commercial law, teacher is the key part of the whole teaching link. Therefore, teachers should control every detail of the teaching, skillfully design and arrange textbooks, cases and other aspects to achieve the expected teaching effect (Sun and Peng, 2010). The teaching reform of civil and commercial law class cannot remain superficial; a further study shall be carried out on the content and practical skills of the course. First of all, teachers should avoid repeating what the book says and should choose the teaching materials that are simple and easy to understand. Through rational integration of case resources, teachers should select cases that are real and closely related to knowledge points, and use cases to mobilize students' discussion and learning initiative. Secondly, teachers should use the multimedia teaching model and the new practice teaching model to improve the students' speculative ability and practical skills, and should use illustrated multimedia courseware and online courses to deepen the students' learning impressions and understanding of key and difficult points (Fu and Zhang, 2013). At the same time, teachers should improve the existing course assessment mode to promote the balanced development of theory and practice. According to the requirements of course teaching reform, as well as the professional requirements of civil and commercial law, a variety of assessment modes may be used, and diversified assessment mechanism combining grading system, centesimal system and credit system may be adopted, so as to restrain students' negative learning mood. In addition, the cultivation of students' social practice ability needs be strengthened, and colleges may encourage students to carry out professional internship and vacation work, so as to improve the students' comprehensive understanding of civil and commercial law.

REFERENCES