Research on Teaching Reform Practice and Innovation of Tourism Reception under the Background of National First-Class Undergraduate Specialty Construction

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Abstract: Under the new situation of being selected as a national first-class undergraduate professional construction site, the tourism management major of Hainan Tropical Ocean University has carried out the revision of the professional training program. As a professional platform course, the tourism hospitality industry course is set up to provide tourism management students with professional service knowledge, improve the service quality of future tourism practitioners, and broaden the international vision of professional technology. The article puts forward the teaching reform plan of “Tourism Hospitality Industry” in view of the talent training requirements of the national first-class undergraduate professional construction, the current situation of curriculum teaching and the existing problems. In order to verify the effectiveness of the decision tree model, this paper uses the method of questionnaire to investigate the students majoring in tourism service, in order to understand the teaching effect of Tourism Teaching Reform Based on the decision tree model and the students’ evaluation of the teaching model. The survey results show that the evaluation satisfaction of tourism teaching reform using decision tree is far greater than that of traditional tourism teaching. The application of this model has greatly improved the efficiency of tourism teaching and achieved the expected results, indicating that the model has played a positive role in tourism teaching reform.

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1. Introduction

Tourism reception industry is a basic course for the applied undergraduate major of tourism management. It is one of the four core compulsory courses for the students of this major to learn and master the professional knowledge. This course is a basic course in the talent training mode of tourism majors. Its good learning effect can lay a good basic knowledge system and basic theoretical cultivation for students to follow-up major courses, elective courses and engage in relevant work of this major. Its main teaching task and purpose is to stimulate students' interest in the major and become the responsibility of students' Guide to master professional knowledge. The result of the examination is the score, but the score can not represent all students' learning results. Therefore, we should change from paying attention to the final examination results to paying attention to the guidance and guidance of the learning process (Wang 2013). Enable students to master a certain number of skills and get familiar with relevant skills. The opening of the course is also conducive to improving the professional quality of tourism professionals and broadening their horizons in the field of professional technology.

At the beginning of 2021, the general office of the Ministry of Education issued the notice of the general office of the Ministry of education on publishing the list of national and provincial first-class undergraduate professional construction sites in 2020. The tourism management specialty of Hainan Institute of Tropical Oceanography was successfully selected as the national first-class undergraduate specialty construction site in 2020, which is a breakthrough in the specialty construction of the college and marks that the specialty construction of the college has reached a new height after a long time of efforts (Yu, Wang 2011).

According to the needs of "Hainan International Tourism Island", "Hainan free trade zone and free trade port construction", tourism management specialty makes full use of the advantages that tourism is the primary industry in Hainan, "bases itself on Hainan and serves the South China Sea", and adheres to the education mode of "paying equal attention to knowledge, skills and literacy". Cultivate middle and high-end talents in tourism management with international vision, humanistic quality, service awareness, innovative and entrepreneurial spirit, management ability, practical ability and sense of social responsibility. Tourism Management Major constantly optimizes the curriculum structure, improves the ability system, and constantly serves the growth of students.

As a compulsory course for the major, based on the needs of the construction of national first-class undergraduate major, it is imperative to implement teaching reform. The curriculum system structure, teaching methods, teaching quality and teaching objectives should be further improved and improved to meet the needs of the construction of national first-class undergraduate major in tourism management. (Jiang, Ni, Wang, Bo, Cao 2009) Therefore, the author actively responded to the relevant guidance of the Ministry of education and the school, made some innovations in the basic course of tourism management "tourism reception industry", designed and carried out the "student-centered" teaching method, in order to improve the students' willingness and ability of autonomous learning and achieve better teaching results. Compared with the traditional classroom, how to effectively use various educational tools to carry out teaching activities, increase the in-depth integration of information technology and teaching, and ensure the optimization of teaching effect is the focus of teaching design (Yu 2008). Therefore, with the full help of PPT, Tencent conference, wechat group and QQ group, and according to Ebbinghaus forgetting curve, the author connects the links of autonomous learning, testing, communication, discussion and feedback supervision, and puts forward the "seven step network teaching method" of "student-centered" from three aspects: curriculum resource design, teaching platform design and assessment method design.
online flipped classroom teaching mode (see Figure 1), and carried out in-depth teaching practice in
the basic course of tourism management "tourism reception industry". After more than a month of
course preparation and eight weeks of practical teaching, students have high enthusiasm for course
learning and achieved good teaching results.

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before class</td>
<td>After class</td>
</tr>
<tr>
<td>Student Preview</td>
<td>Classroom instruction</td>
</tr>
<tr>
<td>Choose to explain professional topics</td>
<td>Scoring and evaluation</td>
</tr>
<tr>
<td>Prepare PPT</td>
<td>After class test</td>
</tr>
</tbody>
</table>

Figure 1. Online flipping classroom teaching mode of "seven step network teaching method"

2. The Necessity of Teaching Method Innovation in Tourism Reception Industry

2.1. The Construction of First-Class Undergraduate Course Requires the Innovation of Teaching Methods

According to the notice of the general office of the Ministry of education on publishing the list of
national and provincial first-class undergraduate professional construction sites in 2019 (jgthh
[2019] No. 46), the selected first-class undergraduate professional construction sites should
continue to consolidate the foundation, improve the conditions, and continuously improve the
professional connotation and construction level. We should promote professional high-quality
development with professional certification, implement the concept of "student-centered, output
oriented and continuous improvement", build and make good use of grass-roots teaching
organizations, and form a quality culture with improving talent training as the core.

The training goal of tourism professionals is to cultivate senior tourism talents with broad
theoretical basic knowledge, solid professional service skills, innovative thinking and international
vision (Sinead, Deegan 2005). Tourism reception industry integrates professional knowledge and
service knowledge, which is an important professional course to temper students' professional
theory and service ability (Raybould, Wilkins 2005). In the new situation, the training goal of
tourism talents is not only the acquisition of professional knowledge and skills, but also the service
ability of tourism graduates and the expansion of international vision. Therefore, actively improving
the teaching methods of tourism reception industry and forming a teaching mode focusing on
improving talent training is an important measure to comply with the new requirements of first-
class undergraduate specialty construction (Zheng, Chen2019).
2.2. The Course Nature of Tourism Reception Industry Requires the Innovation of Teaching Methods

High quality teaching materials play an important role in supporting good teaching results. The teaching material of tourism reception industry has 327000 words. According to Baidu reference data, the reading speed of ordinary people is 300 ~ 600 words / min. therefore, it is estimated that the time for students to read the complete teaching material is 9.08 ~ 18.1 hours. The teaching material contains 35 core concepts in 10 chapters and 35 sections. In addition to text narration, there are 11 professional charts and 33 professional tables. The following factors must be considered in teaching: students take longer to read and understand professional charts and tables, students need more time to query and understand unfamiliar terms, teachers' classroom explanation speed is 200 words / min (Li, Li, Shi 2020), and the total teaching hours of tourism reception industry are only 32 hours, that is, 24 hours (45 minutes / class hours, total classroom time 1440 minutes), etc. In teaching, as the main body of learning, students need to give full play to their learning enthusiasm and subjective initiative, complete reading textbooks, find out difficult points, sort out knowledge theories, and finally form a scientific knowledge system of tourism reception industry (Cai 2020). As the organizer of teaching, teachers urgently need to innovate the traditional teaching methods in order to complete the task of teaching theories containing rich knowledge of tourism reception industry.

2.3. The Teaching Time Allocated In the Training Plan of Tourism Management Professionals Promotes the Innovation of Teaching Methods

In the level 19 talent training plan of undergraduate major in hotel management, "tourism reception industry" is opened in the second semester of the first academic year, accounting for 2 credits out of 33.5 credits of major courses, 2 weekly hours and 32 total hours. The professional courses opened in the early stage include introduction to tourism; In the 18 level talent training plan for undergraduate majors in exhibition economy and management, "tourism reception industry" was opened in the first semester of the second academic year, accounting for 2 credits, 2 weekly hours and 32 total hours of 33.5 credits of major courses. The professional courses offered in the early stage include introduction to tourism and introduction to exhibition, while the professional courses offered in the same period include tourism consumer behavior, exhibition project management and Exhibition basic design 1. Because the teaching time of tourism reception industry is less, students are in the primary understanding stage of tourism related knowledge. During the semester of this course, students' learning tasks are heavy. Therefore, how to teach students the teaching contents involving a wide range and many knowledge theories in a short time of only 2 class hours per week has become a major difficulty in teaching. In order to stimulate students' learning initiative, effectively use their spare time to study independently, so as to complete the teaching objectives, it is inevitable to innovate teaching methods in the limited classroom teaching time.

3. Method Innovation of Tourism Reception Industry

3.1 An Explanation of Professional Terms of Tourism Reception Industry Opens the Active Learning Mode

In the innovation of the teaching method of tourism reception industry, the active learning mode of "one language" is adopted, that is, each student is responsible for explaining a professional term
of tourism reception industry in class, and the professional terms explained by each student in the same class are different (Shi 2020). In the first class, the teacher assigned the students to read the textbook tourism reception industry within the teaching week, independently select 50 professional terms and submit them to the teacher. The teacher assigned one of the 50 professional terms selected by each student as the professional term to be explained by the student. The explanation is required to include three parts: unscripted recitation of the definition of professional terms, explanation of the connotation and characteristics of professional terms, and further analysis and explanation through cases. The means that can be used in the explanation include: PPT, blackboard, online video sharing, classroom questioning and interaction with students, case deduction and interactive discussion with students, class QQ group, etc. Teachers use the scoring table (Table 1) in students' explanation of professional terms, synchronously record the key points of students' explanation and score them, and then make one-on-one comments and guidance by using classroom time and after-school time, including finding out students' knowledge confusion points, insufficient explanation ability points and optimizing the intercom solution section. Because of the advantages of strong pertinence and differentiation, it is deeply welcomed by the majority of students, students often take the initiative to discuss after class.

Table 1. Explanation and scoring table of professional terms of tourism reception specialty

<table>
<thead>
<tr>
<th>Full name</th>
<th>Selected terminology</th>
<th>Explain scores and classroom performance</th>
</tr>
</thead>
</table>
| Student number | from the analysis of teaching practice (Fig. 2), students choose more concepts and methods in Chapter I Introduction to tourism reception industry and Chapter II Management of tourism reception industry, because the first two chapters are the basis of the knowledge system of the whole tourism reception industry. In addition, in Chapter V cross-border tourism reception business management, the selection in Section III is also very high. Therefore, starting from students' majors and high-frequency words of interest, choosing professional terms explained by students can not only help students with professional learning, but also meet interesting participation. If the professional terms explained by students are ahead of the teacher's teaching schedule, they will be regarded as preview; if they are synchronized with the teacher's teaching schedule, they will be regarded as joint learning, leak detection and vacancy filling; if they appear after the teacher's teaching schedule, they will be regarded as knowledge review to help everyone consolidate and deepen their impression. After the students explain the professional terms, the teachers give scores according to the key points explained by the students, and then use the classroom or after-school time to give one-on-one comments and guidance. The key points of guidance include: helping students find out their own knowledge doubts, deficiencies in explanation ability, optimization and selection of explanation means, etc. because of their targeted and differentiated characteristics, they are very popular with students, Students often take the initiative to communicate with teachers about progress after class is shown in Figure 2.
3.2 Draw the Knowledge System Map of Tourism Reception Industry to Help Students Complete the Sorting of Ethical Knowledge

In the first week of the teaching week, teachers assign students the task of drawing the knowledge system map of tourism reception industry in the last week of the teaching week, which spans the whole semester. Because college students use fragmented time to accept fragmented knowledge theory and lack of sorting out the accumulated knowledge, the learned knowledge theory is easy to be covered by the latest accepted information or knowledge. The premise of knowledge application is to master knowledge, the premise of mastering knowledge is to understand and remember knowledge, and the premise of understanding and remembering knowledge is to understand knowledge many times (Yan 2021). Through the innovation of teaching methods, teachers ensure that students have at least four opportunities to understand the knowledge of tourism reception industry this semester: for the first time, they understand that they read the whole textbook in order to complete the selection of 50 professional terms (Ma, Yu 2021); For the second time, absorb the knowledge and theory of teaching materials when students explain professional terms and teachers teach; Draw the knowledge system map of tourism reception industry for the third time, and sort out the relationship between knowledge points; For the fourth time, recite the knowledge points for the review before the final exam. During the teaching process, students draw the knowledge system map of tourism unemployment in a variety of ways, including: drawing the knowledge system map with the thinking mapping tool in WPS software, drawing the knowledge system map with XMIND software, inserting the knowledge system map drawn in the form of pictures in PPT or word, drawing notebooks written by hand, etc. The knowledge system map of tourism reception industry submitted by students in five classes contains 3000 ~ 6500 words, including the main knowledge points of 10 chapters and 35 sections. This task changes the habit that students are unwilling to take notes by hand or the content is simplified and one-sided when taking notes, helps students sort out the connection between knowledge points, and achieves good results, which is mainly reflected in the examination. The score rate of students answering basic conceptual questions such as single choice questions and multiple-choice questions in the test paper is particularly high, because the foundation is well laid (Table 2). The task of drawing the
knowledge system map of tourism reception industry has changed students' habit of relaxation and laissez faire after completing their own explanation of professional terms, and helped students learn the knowledge theory of tourism reception industry from an overall and systematic perspective (Wang, Yao, Xu 2020).

Table 2. Analysis of average score of single choice and multiple choice in the examination paper of tourism reception industry

<table>
<thead>
<tr>
<th>Class / question type</th>
<th>Single choice (20 points)</th>
<th>Multiple choice (20 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 19 Tourism Management</td>
<td>18.36</td>
<td>16.42</td>
</tr>
<tr>
<td>Level 20 Tourism Management</td>
<td>17.94</td>
<td>17.38</td>
</tr>
</tbody>
</table>

3.3 Teachers Play Multiple Roles to Create an Active Learning Atmosphere for Students

In the teaching process of tourism reception industry, the innovation of teaching methods is inseparable from the multiple roles of teachers. Teachers play many roles: organizer, consultant and questioner, guide, analyst, evaluator, encouragement, whip, coordinator, etc. How to play various roles of teachers and maximize the atmosphere of students' active learning has always been the goal of teachers who have been teaching for many years. In the teaching process, teachers who master rich knowledge theory can not stimulate students' learning initiative, knowledge can not be effectively transmitted, and the teaching result is bad.

The knowledge learned by students is the core of teaching and the main standard for testing teaching results. First of all, as a rigorous organizer, teachers should not only stimulate students' interest in learning, but also help students achieve their learning goals. In the reformed teaching method, that is, the explanation of professional terms in tourism reception industry, in the traditional teaching of reading according to the book or PPT browsing, students do not necessarily pursue a deep understanding of knowledge by looking at teaching materials or PPT and listening to teachers' explanations with their eyes. In order to use cases, Explain and interpret for the whole class, and the students have entered the stage of "repeated deliberation". The whole teaching process, no longer only one teacher, but dozens of teachers, stimulated everyone's enthusiasm. The excellent students of the same age around college students have the most exemplary driving effect. The excellent students drive the backward students, which has a very good effect on promoting the active learning atmosphere of the whole class. Widely collect the latest tourism cases and share humorous or easy to understand Baidu Encyclopedia videos.

Secondly, the teacher's role as a guide. Before students explain professional terms, first determine the chapter of professional terms explained in this course and the coordinates in the knowledge system of tourism reception industry for students. Cultivate students' thinking habit of looking at details from the whole and connecting details with the whole. Thirdly, the teacher's role as a motivator, in the students' explanation of professional terminology of tourism reception industry, for the abnormal performance due to tension, perfunctory performance due to inertia, panic performance due to anxious completion of tasks, and off topic performance due to self preference, the teacher should suit the remedy to the case and urge the students to complete the tasks according to quality and quantity. Finally, as a consultant, the teacher in class will answer questions for the whole class when students explain the professional terms of tourism reception industry and the related terms that students cannot master in the process of self-study.
3.4 Decision Tree Model

Decision tree is a tree structure (either a binary tree or a non-binary tree). Each of its non-leaf nodes represents a test on a feature attribute, each branch represents the output of this feature attribute on some value domain, and each leaf node holds a category. The process of decision making using a decision tree starts from the root node, tests the corresponding feature attribute in the item to be classified, and selects the output branch according to its value until it reaches the leaf node, where the category stored in the leaf node is used as the decision result. The principle of the decision tree is shown in Figure 3.

![Figure 3. Schematic diagram of decision tree](image)

When building the decision tree, in order to compare the advantages and disadvantages of different features to measure their performance, we often use information gain (ID3), information gain ratio (C4.5) and Gini index (purity) to build the decision tree. Considering the large volume of experimental samples, we use information gain ratio as the measurement standard of feature selection, which can alleviate ID3’s preference for features with more values in the case of insufficient samples. In addition, the method of dealing with missing values and simple regularization pruning are added to alleviate the problem of over fitting.

Feature entropy can be used to measure the uncertainty of sample distribution after using a certain feature. The more the number of values, the more uniform the distribution of the samples obtained after segmentation, the greater the characteristic entropy. It can be used as the denominator to punish the feature with many values, so as to correct the preference of ID3.

\[
H_A(D) = - \sum_{i=1}^{n} \frac{|D_i|}{|D|} \log \left( \frac{|D_i|}{|D|} \right) \tag{1}
\]

Where, \(i\) is the number of samples per division.

The formula of information gain ratio is:

\[
I_R(D, A) = \frac{H(D, A)}{H_A(D)} \tag{2}
\]

Where \(R\) is the ratio, \(H_A(D)\) is the feature entropy, which is used to balance the influence of the number of feature values on the information gain.

The evaluation satisfaction survey of tourism teaching reform decision tree model is shown in Figure 4.
Figure 4. Satisfaction evaluation of Tourism Teaching

According to figure 4, the evaluation satisfaction of tourism teaching reform using decision tree is far greater than that of traditional tourism teaching. The application of this model has greatly improved the efficiency of tourism teaching and achieved the expected results, indicating that the model has played a positive role in tourism teaching reform.

4. Summary of Teaching Practice

4.1 Transformation of Teachers' Role

The dominant position of students in learning does not mean that the status of teachers is reduced. According to the characteristics of discovery learning, teachers should perform more diversified responsibilities in the teaching process, from the imparter of knowledge to the promoter, organizer and guide of students' learning (Xuan 2016). According to vygowskii's "zone of proximal development" theory, the difference between students' current level, that is, the level of problem-solving that can be achieved when they are independent activities, and students' possible development level, that is, the potential obtained through teaching, is the zone of proximal development. The task of teachers is to guide teaching according to the characteristics of learners, focus on the students' recent development area, and trigger students' self cognition and construction of new knowledge on the basis of original knowledge and experience through various teaching means, so as to surpass their recent development area and reach the level of the next development stage.

4.2 Pay Attention to Learning Process and Discover Learning

Discovery learning refers to a learning method aiming at cultivating inquiry thinking methods, making full use of the provided conditions, thinking and discovering knowledge, and mastering the principles and laws of knowledge (Jerome S. Bruner 1982). Discovery is not limited to the act of seeking what human beings do not yet know. Correctly, discovery includes all forms of personal knowledge with their own mind (He, He, u 2019). Learning is not that students passively wait for and directly accept the learning content presented by teachers, but actively observe things and solve problems under the guidance and Inspiration of teachers, discover behavior, recognize things, understand the basic structure of disciplines and realize the construction of knowledge through a series of transformation, combination and understanding. In the specific teaching process, firstly, teachers should prepare rich teaching materials, create rich and specific situations for students, and stimulate students' internal learning motivation; Secondly, teachers can encourage students to collect and organize information in the process of practice and boldly guess and imagine.
assumptions by setting effective questions or difficult task assumptions; Thirdly, teachers should lead students to verify these hypotheses in time, and organize students to verify and improve hypotheses through sharing, discussion and evaluation; Finally, students should learn to use assumptions to solve practical problems and achieve the purpose of applying what they have learned.

5. Conclusions

Under the background of the current COVID-19 and the construction of national first-class undergraduate majors, the reform and innovation of tourism reception teaching has become an urgent problem to be solved. Tourism Teaching Based on decision tree model is a new type of quality education. The rational use of tourism education under the decision tree model can greatly improve the learning efficiency, stimulate students' learning initiative and improve the educational effect. At the same time, students' satisfaction is also very high and are loved by students. Making rational use of tourism education under the decision tree model can solve the problems existing in the current teaching of tourism service industry and promote the development of university tourism service industry. It is the top priority of university tourism service industry education. In the long teaching career, teachers should adhere to the principle of teaching and learning and the arduous spirit of bowing to the head and being willing to be an ox. they are not satisfied with the limited classroom teaching time, not limited to the narrow classroom space and not afraid of the information of speeding change in the new era. Teachers should constantly innovate teaching methods, ensure teaching quality, complete teaching objectives and help undergraduate students majoring in tourism management grow into talents.

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