The Construction of Network Teaching Platform for Flight Attendant Major Based on QMS Concept—Taking Psychology of Civil Aviation Passenger Service as an Example

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Abstract. Network teaching platform is widely used in college at present, making the teaching and learning approaches diversified. Under the guidance of QMS (Quality Management System) concept, the network teaching platform for the course of Psychology of Civil Aviation Passenger Service gives thorough consideration to the needs of different learners at different levels and effectively enhances their comprehensive ability. This network teaching platform is very useful and significant to improve the teaching quality of flight attendants major. Thus, this practical model for the construction of course network teaching platform has popularization foreground and application value.

Introduction

The goal of higher vocational education in China is to train technical personnel with high-quality for production, management and service\([1,2]\). To achieve this goal, the higher vocational colleges should improve teaching quality, and teacher should teach in diverse instructional methods, and provide students with rich content and more diversified learning methods. With the further popularization of the Internet and the deepening application of digital construction in colleges and universities, college students tend to learn through mobile phones and computers. Thus, network teaching platform is widely used in teaching in colleges and universities.

Network teaching platform is designed to assist classroom teaching with more interaction and communication. It creates a curriculum-centered network teaching environment that integrates teaching and learning. The teacher's role changes from indoctrination to guidance and the students’ learning attitude change from passive absorption to diversified and active learning\([3-5]\).

QMS refers to the quality management system, which is established within the enterprise, to ensure product quality or the necessary and systematic quality activities for quality objectives\([6]\). QMS concept is widely used in airline company safety management, achieved good results. QMS includes three parts. There are strategic planning, strategic disposition, and improvement of strategic planning and disposition. According to these three parts, there are three phases for business organizations to ensure the effectiveness of enterprise quality management. The first one is the planning phase, which means the top-design of the future strategy. The second phase is to ensure the effective completion of the plan, which is to establish the best way to the implement of the plan. The third one is the improvement phase. That is to improve the planning and the disposition according to the problems which appeared in second phase.

These three feasible phases of QMS concept are highly matching the design of the course network teaching platform. Network teaching platform based on QMS concept can fully take the needs of different learners at different phases into account, and enhance students’ comprehensive
ability effectively. Psychology of Civil Aviation Passenger Service is the core theory course which set for the flight attendant major by School of Civil Aviation Management in Guangzhou Civil Aviation College. Taking this course as an example, this paper explores the construction and application of the network teaching platform of this course under the guidance of QMS concept. The experience provide a useful reference for the construction of other courses’ network teaching platform, especially for the theoretical courses, and make solid foundation for the construction of the teaching resources database for flight attendant.

The Current Teaching Situation of Psychology of Civil Aviation Passenger Service

Psychology of Civil Aviation Passenger Service is the core course of flight attendant major. It is an application subject. It studies and explores the psychological laws and behaviors of passengers and service personnel in the civil aviation passenger’s service, and the basic principles and methods to carry out effective service and management according to the laws and behaviors[7].

This course focuses on the analysis of typical cases of civil aviation passenger service. It can meet the need of teaching process and civil aviation service staff somehow. But there are still some problems exist in the class due to the shortcomings of the theory class, such as poor effect of classroom teaching, students have not initiative to learn after school, students have not enough awareness of the position of the industry, and so on.

The construction and application of the network teaching platform of Psychology of Civil Aviation Passenger Service can solve the above problems effectively. It innovate learning models by means of the enrichment of learning resources, such as text, video, audio and other multimedia, help students apply psychological rules to the service process successfully, enhance the civil aviation professional service ability of students major in flight attendant, cultivate excellent professional psychological quality, and develop a solid foundation for civil aviation service.

The Strategic Planning of the Construction of Course Network Teaching Platform

Strategic Planning means to organize all steps for the implement of the strategic plan. The strategic plan of the network teaching platform of this course is to meet the needs of different learners at different phases by providing pertinent and practical course content which was developed according to the job requirement, psychological theory, and civil aviation service activity.

With psychological knowledge, the platform became a self-learning platform for students. It can extend the classroom and teaching, support online learning and self-examination. It is very convenient to support students major in flight attendant service to provide good service, enhance their adaptability and professional competitiveness. So students can gradually recognize the enterprises and their cultural spirits of civil aviation.

There are four levels positioning of this platform.

The first positioning is comprehensiveness. It contains eleven modules. There are course notification module, course description module, teaching information module, teaching team module, test module, assignment module, discussion module, teaching video module, common problems module, cooperation module between colleges and enterprises, learning resource co-construction module. There can support distance learning and self-inspection of students effectively.

The second positioning is serviceability. It can provide distance learning service for students, like preview, after-school consolidation, and online test.

The third positioning is timeliness. Via this platform, teacher can update teaching resources and provide accurate web link entrance to students, give prompt feedback and evaluation toward assignments and discussions of students.

The fourth positioning is convenience. All resources of the course platform can be accessed through computer and mobile phone. The platform is also a good communication tool. Teacher can
give feedback to student’s questions and doubts via email and the reply function of the forum, and evaluate students’ learning results.

Disposition of the Strategic Planning of the Construction of Course Network Teaching Platform

Disposition of strategic planning is the concrete measure and best way to implement plan when the strategic plan has been identified. In order to achieve strategic planning requirements of the platform, teacher use the strategy of “six groups of one lesson with one resource” and “three extensions” to design twelve chapters content of the course on the network teaching platform.

“Six Groups of One Lesson with One Resource” Strategy

(1) One lesson with one case. Teacher provides the latest real-life case which obtained from the front-line of civil aviation. The case is closely related to the theme that students should preview. For example, when teaching the Personality Differences of Passengers of the Civil Aviation, teachers introduces a latest-happened case that a man splash water to stewardess in the flight of China Southern Airlines from Beijing to Guangzhou, to guide students to preview and recognize the personality differences of air passengers.

(2) One lesson with one collaboration discussion assignment. Students should complete the assignment in a discussion group. It helps them to extend the classroom teaching, cultivate team consciousness, and consolidate the learning effect. For example, when the class of the Emotions and Feelings Civil Aviation Passengers was over, teacher introduces a case that a couple born in 1980s dispute with the airport workers in Hangzhou and due to flight delays, and organizes students to analyze the reasons and solutions of this case in group, and draw the conclusion.

(3) One lesson with one analysis. When a teaching module was completed, teacher provides a context which related to hot topics or focus on the module for students to analyze individually. It is very useful to broaden their knowledge. For example, in the model of Differences in the Passengers’ Personality of Civil Aviation Passenger, teacher sets up the following context for students to analyze after class. In the Journey to the West, there are five different personalities like Tang Seng, Monkey Sun Wukong, Pig Zhu Bajie, Sha Seng, and White Dragon Horse. If you are a passenger, whom do you want to provide services for you? If you are a flight attendant, whom do you want to serve? Why? After checking students’ answers, teacher gives students timely feedback and evaluation through the discussion forum in the platform.

(4) One lesson with one video. Teacher offers a real video which form the flight attendant working position in the front-line. This kind of lively video can better support classroom teaching, and excite students to discuss in the classroom. For example, in the class of the Emotions and Feelings of Civil Aviation Passengers, teacher plays a video case that a passenger conflicted with a cleaner in Changsha airport. It helps students to recognize factors that affect the emotional and psychological changes of passengers. Also, at the end of a teaching module, teacher develops a micro-video about the important and difficult points of this module. It facilitates students’ online learning and consolidates the key and difficult contents.

(5) One lesson with one test. When a module was completed, teacher works out the module examination online test paper. There are five kinds of questions in the test paper, fill in the blank, multiple choice questions, judging questions, short answer questions, and case analysis questions. Students finish the test on the online platform, and get the test result immediately after submitting. It helps student to self-inspect their learning results, and self-review the weak links of knowledge points according to their own score.

(6) One lesson with one measurement. Teacher develops a professional psychological measurement that related to module which just finished. It was used for students to self-evaluate themselves. For example, when the module of the Differences in the Passengers’ Personality of Civil Aviation passengers was finished, teacher develops a psychological measurement about temperament types. After the self-evaluation, students not only probable know their own temperament type, but also deepen the understanding of different types of temperament.
“Three Extensions” Strategy

(1) School-enterprise Integration module

The school-enterprise integration module was developed in this platform. It closely reflects the latest business news in the industry, spreads the relevant enterprises’ culture, and enhances the professional quality of students.

The first way is video interviews and live lectures. Teacher invites excellent graduates, airline front-line staffs, and management personnel to tell the lively story that happened in the forefront position via video conference module. Teacher also invites business personnel from company to enter the campus, carry out lectures and communicate with students face to face. For example, students interviewed Liang Jing, the current crew chief of China Southern Airlines who major in flight attendant of our college and graduated in 2008. Through video conference, students posted questions like the importance of this course to flight attendant services, how to deal with emotional passengers in the cabin when their flight is delay? Then, Liang Jing answered them in detail with her own work experience. It have significant meaning and beneficial to students.

The second way is introduce the profession articles from the Civil Aviation Employees' Psychological Care WeChat Public Number which founded by Civil Aviation Union of China and assisted by the Chinese Academy of Sciences Institute of Psychology. The articles like “how can the airport staff help passengers to reduce stress?” can help students to broaden their knowledge.

The third way is upload excellent promotional videos about industry and enterprises to the platform, such as official videos about Air China, China Southern Airlines, and China Eastern Airlines. It helps students to recognize professional ethics, enterprise culture and the construction of professionalism of civil aviation enterprises and institutions.

(2) Teachers and Students co-construct learning resources database

The topic of is the tenth chapter is Common Problems and Emergency in Civil Aviation Services. Teacher divides students into seven groups. Each group draws lots that related to seven subjects which specified by the teacher, searches the real case of civil aviation, and develops PPT coordinately. Each member of every group should give presentation individually. Every group should give presentation to interpret their topic. The next group will ask questions toward the topic just present. All resources that created by each groups upload to the share module of learning resources database on the platform, like PPT, video, etc.

(3) Survey of Teaching Quality

The questionnaire of teaching quality helps the teaching team to know about how well that the network teaching platform helps students to learn.

The questionnaire was published on the Questionnaire Star website, a network questionnaire survey platform. Teacher share the hyper link of questionnaire on the platform. Then teacher analyzes the results of the survey, understands students’ teaching suggestions and learning needs, then, improves teaching and the construction of network teaching platform according to the results and suggestions of the survey.

Table 1. Whether the Curriculum can Meet the Needs of Students’ Professional Learning?

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Absolutely meet the needs</td>
<td>39.86%</td>
</tr>
<tr>
<td>Mostly meet the needs</td>
<td>50%</td>
</tr>
<tr>
<td>Partly meet the needs</td>
<td>10.14%</td>
</tr>
<tr>
<td>Scarcely meet the needs</td>
<td>0%</td>
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Table 2. Students' Evaluation on Practice Teaching.

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<tbody>
<tr>
<td>Rich contents are conducive to achieving goals</td>
<td>50.72%</td>
</tr>
<tr>
<td>Various forms can stimulate learning interests</td>
<td>43.48%</td>
</tr>
<tr>
<td>Inadequate content is not conducive to achieving learning goals</td>
<td>2.17%</td>
</tr>
<tr>
<td>Insufficient form cannot stimulate learning interests</td>
<td>3.62%</td>
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</tbody>
</table>
### Table 3. Evaluation of Students' Comprehensive Ability.

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<tbody>
<tr>
<td>Improve the ability of analyzing professional knowledge and solving problems</td>
<td>68.12%</td>
</tr>
<tr>
<td>Improve the language expression skill</td>
<td>13.04%</td>
</tr>
<tr>
<td>Improve the coordination and communication ability</td>
<td>15.22%</td>
</tr>
<tr>
<td>Improve practice and innovation ability</td>
<td>3.62%</td>
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</table>

### Improvement of Disposition of Strategic Planning of the Construction of Course Network Teaching Platform

In the phase of the improvement of disposition of the strategic planning, constructive suggestions are raised toward the problems that existed in the implementation phase. There are three suggestions for the construction of the network teaching platform of this course according to the problems in the application of the platform.

#### Innovate Forms to Increase Using Frequency

According to the results of survey, only 32.61% students often login the platform in their spare time. The frequency of the use of network teaching platform is quite low.

<table>
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<tr>
<th>Table 4. Students’ Login Situation.</th>
<th>Table 5. Frequency of Students’ Use of Platform.</th>
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</thead>
<tbody>
<tr>
<td>Often</td>
<td>32.61%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>54.35%</td>
</tr>
<tr>
<td>Scarcely</td>
<td>11.59%</td>
</tr>
<tr>
<td>Never</td>
<td>1.45%</td>
</tr>
<tr>
<td>Often</td>
<td>37.68</td>
</tr>
<tr>
<td>Sometimes</td>
<td>47.83%</td>
</tr>
<tr>
<td>Scarcely</td>
<td>13.77%</td>
</tr>
<tr>
<td>Never</td>
<td>0.72%</td>
</tr>
</tbody>
</table>

In order to solve this problem, teacher should capture the hot topics which students are most concerned about and the forefront news of the industry, and update the teaching module in the platform with the contents that students are most interesting in. For example, teacher should collect the latest video from the forefront position, so that students can have a profound understanding toward their major. The school should invite experts to record micro video specific for some important modules. Teacher can organize PPT presentation competition, and invite experts and outstanding graduates as judges to give live comments toward students’ performance on the spot. Also, the proportion of practice teaching should be increased.

#### Carry out Comprehensive Study to Improve the Scientificity of the Platform

Teachers should carry out comprehensive study toward network teaching platform, such as, continually study articles about network teaching platform in the domestic and foreign, gain the successful experience form the excellent platform, apply for related projects, write papers, develop professional teaching resource database, then, put forward useful guidance to the construction of network teaching platform, and improve the scientificity of the platform.

#### Conduct Extensive Investigation to Enhance the Industry Recognition of the Platform

In the construction of network teaching platform, the enterprises should be introduced as the third party to carry out scientific demonstration. The construction of the platform should be compared with industry development trends. Comprehensive evaluation should be carried out during the construction process. Moreover, experts and front-line workers should be invited to participate in the construction of network teaching platform. They can provide typical cases from front-line positions and the latest ideas about the development of enterprises. These cases and ideas are very useful teaching suggestion.
Conclusion

The network teaching platform for the course of Psychology of Civil Aviation Passenger Service based on QMS concept has achieved good teaching effect. The platform can enable students easily combine theory with practice, enhance students' ability to analyze and solve problems, improve position adaptability and competitiveness. Thus, it is significant to the improvement of the teaching quality of flight attendants major. This practical model has the value of popularization and application.

References