

# *A Practical Exploration of Information-centered Classroom Teaching Design in Higher Vocational Colleges*

—Taking Classroom Teaching of Course Content “Cabin Service Communication Skills for Disabled Passengers” as an Example

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**Abstract**—With the further development of information technology, the quality upgrading of information-centered classroom teaching has become the highlights in vocational education. Taking classroom teaching of the course content “Cabin Service Communication Skills for Disabled Passengers” as an example, this paper explores information-centered classroom teaching design in higher vocational colleges. The specific steps of information-centered teaching design of the content are mainly exhibited from four aspects: teaching analysis, teaching strategy, implementation and reflection, it concludes that information-centered classroom teaching design has surely promoted the reform of classroom teaching and improved the teaching quality, providing a useful reference for information-centered teaching design for professional courses for flight attendant students in higher vocational schools.

**Keywords**—*information-centered, teaching design, practical exploration, teaching process*

## I. INTRODUCTION

In the era of “Internet+”, a blended learning model, combined with information technology, independent and meaningful learning will be dominant in the future. The Development Plan for Information Technology in Education for the 13th Five-Year Plan Period (2016-2020), published by the Ministry of Education, P. R. C, points out that “...modern information technology should be utilized to transform the traditional teaching in the field of vocational education so as to break through the bottlenecks in practical teaching, namely, inaccessible to professional know-how, invisible of practical training equipment, incapable of acquiring practical skills, and difficult to represent the given tasks or situations.” It can be

seen that the level of information-centered classroom teaching design will determine the quality of classroom teaching in higher vocational colleges in the future. This paper introduces the innovative practice of information-centered classroom teaching design by taking the unit part “Cabin Service Communication Skills for Disabled Passengers” in the course “Service Communication with Aircraft Passengers” for flight attendant students in Guangzhou Civil Aviation College as an example and findings indicate that information-centered classroom teaching design enables to optimize the teaching process and improve the teaching quality.

## II. TEACHING ANALYSIS

### A. Analysis of Teaching Content

As one of the core professional courses for flight attendant students, Service Communication with Aircraft Passengers, aims at developing students’ professional abilities, helping students understand and apply their in-flight service and communication skills through cabin environment simulations and special training in discourse tactics.

Being a unit part “Effective Service Communication with Special Passengers” of the course “Service Communication with Aircraft Passengers”, this classroom teaching design is information-centered, combined with professional learning and practical activities, and students are required to finish real job tasks through cabin environment simulations in order to master service language norms and communication skills based on the characteristics and service needs of disabled passengers.

### B. Analysis of Teaching Objects

The students in the class are first-year flight attendant majors (three-year program), who have acquired relevant knowledge of service psychology and service etiquette from other courses. Although these students can basically complete the general cabin service communication tasks, their communication skills need to be further enhanced when dealing with special passengers. As “post-95s” students, they have high information sensitivity and awareness of experiential information, which means they are equipped with the strong

hands-on ability and learning transference ability, besides, they are excellent in simulation, presentation and summary.

### C. Analysis of Teaching Goals

Explicit teaching goals can greatly promote teachers’ teaching efficiency and students’ learning performance. The teaching content, based on curriculum standards, learning analysis and characteristics of professional positions of cabin crew, meets three teaching goals: knowledge and skills acquisition, and character development.

TABLE I. CLASSROOM TEACHING GOALS

Knowledge Acquisition	Skills Acquisition	Character Development
Learn about specific types of disabled passengers	Identify service needs of different types of disabled passengers	Cultivate sincere service consciousness with respect to guests
Familiarize with characteristics of different types of disabled passengers	Utilize standardized service discourses to serve disabled passengers	Nurture modern aviation spirits—teamwork and dedication
Master standardized service discourses for disabled passengers	Apply service communication skills to serve disabled passengers	Develop flexibility and adaptability

According to the analysis of teaching content, teaching objects and teaching goals, this course is focused on helping students master the service needs of disabled passengers and service language norms for passengers with disabilities as well as apply relevant service communication skills appropriately. The challenge is how to cultivate the students’ empathy for disabled passengers in real-world scenarios.

### III. TEACHING STRATEGY

This course is student-centered, utilizes flipped classrooms teaching methods, integrating the online and offline, virtual and practical experience. Online micro-class resources enable students to acquire relevant knowledge before class whenever and wherever possible. And classroom teaching helps achieve the teaching goals by equipping the students with a vital combination of the theoretical with the practical. The teaching content is very practical, task-driven, and a variety of teaching methods, including demonstration method and expository method, effectively generate students’ interest in learning. Information-centered teaching makes the teaching content more visual and practical, which greatly promotes nursing students’ critical thinking abilities.

The whole teaching process is task-oriented, namely, the real world situations for flight attendants: learning and practice of service communication skills for disabled passengers. During the process, the teaching mode “learning by doing, teaching by doing” is applied to help students master how to increase their perceptions of sincerity when serving different types of passengers in real cases, that is, differentiated service communication skills, based on characteristics of different types of passengers, are highlighted in classroom teaching so as to improve their service awareness (see TABLE II).

Pre-class self-study, focusing on developing the students’ self-learning abilities, empowers the students to know more about the teaching focus and obstacles of the teaching content through situation role-plays and self-study of theoretical knowledge (micro-class).

Classwork, stressing on interactions between the teacher and students, guides the students to sum up relevant theoretical knowledge through group discussions, and a “five-stage methodology”— introduction of industrial cases, sensory deprivation experiences, teacher demonstrations, group discussions & expert comments, knowledge transfer & summary by the teacher and students, is used to help the students understand the key points and challenges of the teaching content.

Post-class development, paying much attention to the consolidation of the students’ learning outcomes, examines the study performance of the students in the ways of sharing learning achievement, designing creative service schemes and analyzing industrial real cases with an aim to assist the students to tactfully grasp the proper service communication skills for disabled passengers.

TABLE II. COURSE TEACHING PROCESS

Teaching Stage	Teaching Task
PRE-CLASS PREPAREDNESS	MICRO-CLASS STUDY, ROLE PLAY, THE TEST OF THEORETICAL KNOWLEDGE, ASSESSMENT OF SERVICE AWARENESS;
Course induction (5 mins)	Introduction of industrial cases, teacher's comments, students' peer review;
Sensory deprivation experiences (20 mins)	Vr experience – imagine i am blind; A330 cabin environment simulation—imagine i am a visually impaired passenger;
Teacher demonstrations (20 mins)	Demonstration by the double-qualified teacher; Experience sharing by an in-service flight attendant; Group discussions;
Knowledge transfer (35 mins)	Introduction of industrial cases, teacher's comments, students' peer review; Online comments by industry experts;
Summary (10 mins)	Four-step summary of teaching obstacles;
Post-class development	Sharing learning outcomes; Designing service schemes; Industrial case study

#### IV. IMPLEMENTATION

##### A. Pre-class preparedness

The teacher uploaded learning resources and assigned tasks to the online teaching platform, Cloud Classroom, and students were required to study those resources and finish the four tasks by themselves. In Task 1, the students studied a micro-class about serving disabled passengers to learn theoretical knowledge independently for the sake of classroom preparedness. In Task 2, the students were asked to complete online theoretical test questions and an assessment of service awareness. In Task 3, the entire class was divided into several cabin working groups based on the results of the above-mentioned test and assessment. In cabin environment simulations, each group was required to design a situation role play about serving visually impaired passengers according to cabin service procedures and shoot a short film for upload to the database. In Task 4, the students watched the films shoot by all the groups on the platform. By fulfilling these pre-class tasks, the students had commanded some basic theoretical knowledge, which laid a foundation for optimizing the teaching effectiveness.

##### B. Classroom implementation

###### 1) Course induction, identifying the teaching focus

Before class, the students reviewed each group's role play and commented on each other's performance, the teacher also provided input to help the students learn better about the teaching focus. Besides, the teacher presented the connotative meaning of sincere service and flight attendants' excellent service communication skills in a vivid way by studying a real case—Sincere Service Provided by Cabin Attendants from Xiamen Airlines to Visually Impaired Passengers.

###### 2) Sensory deprivation experiences, setting teaching obstacles

The students used VR to strengthen their service experience in Task 1 Imagine I am blind. In Task 2, the students conducted cabin environment simulations, pretending to be visually impaired passengers by wearing eye masks. This kind of sensory deprivation experience helped train the students to

perceive the inner world of disabled air travelers and build up their empathy.

Once completing the two tasks, the teacher guided the students to reflect on the reasons for inefficient communication in the given tasks based on the industrial case study, the students' practical experience and reviews on the role play films shoot before class. The teacher set up four reasons for the students to choose, namely, lack of preview, lack of empathy, lack of patience, lack of experience, leading the students to conduct an online vote in class on their WeChat learning group account to discern common problems and identify difficult points for teaching and learning.

###### 3) Teacher demonstrations, breaking through the key and difficult points for teaching

The teacher guided the students to break through the key and difficult points for teaching step by step by using the demonstration method and lecturing method. Firstly, an in-service flight attendant working in Business Class and First Class was invited to share their experience so as to give the students an intuitive feeling for the industry standards and norms. Secondly, a double-qualified teacher, which means he or she is not only a "teacher" but also a "coach", demonstrated the whole process of service communication with visually impaired passengers based on industry standards by playing the micro-class shoot beforehand in class, which the students then utilized to compare and contrast with their own efforts in the situation role plays in order to deepen the understanding of communication skills for disabled passengers.

Finally, in accordance with the content of the micro-class, the teacher elaborated the communication skills for visually impaired passengers at all stages of cabin service, step by step, and a "four-step methodology" was applied in the teacher's lecturing: Step 1 Take a look, Step 2 Ask questions, Step 3 Listen to the passengers, Step 4 Offer Helps, which helped the students remember the key points and operational steps. Afterward, the students were required to take the quiz "Stage Challenge" in the unit of the textbook to examine their learning performance.

#### 4) Knowledge transfer, responding to the key and difficult points for teaching

The teacher supervised the students to express their views on the content of the task cards in the way of group discussions, which provided the students a good opportunity for group learning and thinking, leading the students to transfer what they had learned, that is, to summarize cabin service communication skills for other types of disabled passengers based on learning the skills for visually impaired travelers. To begin with, the teacher assigned a practical task—sensory deprivation experiences: Imagine I am a visually impaired passenger, the students then wore headphones and bandages to pretend to be

hearing impaired and physically disabled passengers to complete simple tasks in the simulation cabin.

Then, the teacher distributed four learning task cards one by one to the online teaching platform (see TABLE III ), and each group of students took turns to write down their findings on a poster, and made presentation and shared their groups views before taking next task card for discussion. After the students completed reporting the results of their discussions about the contents of the four task cards, the teacher invited an industry expert to make appraisals on the learning outcomes of each group on site. In the end, the teacher organized several groups to vote for the team who performed best in the reporting session to further motivate the students' engagement in class.

TABLE III. LEARNING TASK CARDS FOR DISCUSSION

Item	Task Content
Task Card 1	list the characteristics of passengers with hearing impairments and mutilated limbs
Task Card 2	sum up the service needs of disabled passengers at all stages of cabin service
Task Card 3	summarize the main points of service for passengers with disabilities
Task Card 4	conclude communication skills for serving disabled passengers

#### 5) Knowledge summary and mastery

At this stage, the teacher summarized three kinds of common service needs of passengers with disabilities in the cabin, and the corresponding service points and communication skills for flight attendants to help the students identify the main points in actual work settings. The course helped the students consolidate the main points of professional knowledge as well as break through the key and difficult points for teaching by adopting the "four-step methodology" in service communication with special passengers. At last, the students were assessed for their mastery of the knowledge by taking another quiz in class.

#### C. Post-class development

After class, the students were required to fulfill three practical tasks so as to ensure the further consolidation and application of their learning outcomes achieved in class. In Task 1, the students were asked to summarize their learning achievement for upload to the class WeChat group account. In Task 2, each group was assigned to design a reception and service scheme for disabled passengers based on the given settings of cabin service, which was then published to the WeChat learning group. All the students were free to vote for the best work, which further internalized their knowledge and skills obtained from the previous study and sublimated their feelings and emotions about sincerer service. In Task 3, each group attempted to collect industry real cases about sincere service to disabled passengers and conduct case study before uploading to the platform for learning results sharing.

### V. TEACHING REFLECTION

#### A. Teaching assessment

This course adopts a diversified evaluation mode, the evaluation subject is not limited to the teacher, instead, student

peer review is also incorporated into the assessment process, which can stimulate the initiatives of the students in the learning process. This evaluation method, integrated with information technology, achieves the timely assessment of students' study progress for the whole process, from the pre-class, in-class to after-class activities, and realizes the comprehensive and objective assessment of students' performance from the following four dimensions: performance in pre-class tasks, classwork performance, test scores and after-class development.

#### B. Advantages and innovations

1) Student-centered pedagogy is highlighted. The course is student-centered, with the students playing the key role in the whole process of teaching and learning, from pre-class role plays, in-class sensory experience, and group discussions to post-class development. From passive acceptance to active involvement, the students become the focus of concern, both in and out of the classroom, and teachers shift from traditional educators to promoters and guides of student learning activities.

2) Experiential teaching helps cultivate empathy and breaks through the teaching focus and obstacles. The students are trained to develop empathy through sensory experience so that the key and difficult points for teaching and learning can be easily mastered and overcome. In the process of teaching and learning, information technology, such as VR, smartphone apps, etc., is effectively used to testify the effects of sensory experience.

3) The real-life simulation training runs through the whole teaching and learning process. Situation role plays designed according to the service needs in the real world, introduction of industry standards and norms made by an in-service flight attendant, and on-site comments and appraisals rendered by industry experts, all these activities help the students better

understand the professional image and deportment that flight attendants should be equipped with.

4) Procedural assessment integrates the cultivation of awareness of sincere service. The quality of educating and nursing cabin crew is closely related to the service quality of China's civil aviation industry, therefore, cultivating the students' consciousness with respect to guests has been the learning target during the whole teaching process, and a whole-process assessment is implemented with the aim of developing the students' awareness of sincere service.

## VI. CONCLUSION

In order to adapt to the development of vocational education in the new era, teachers in vocational colleges are actively carrying out the reform of information-centered classroom teaching design, innovating teaching forms and enriching teaching contents, which diversifies the learning methods for students and improves the teaching effectiveness to a certain extent. However, simple use of information technology will not guarantee the improvement of teaching

effectiveness, which requires the teachers to further optimize all the stages of the information-centered classroom in the teaching practice, and design the teaching and learning process by adhering to the student-centered concept in an all-round way so as to upgrade the teaching quality of vocational education to a new level.

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