The combination of flipped classroom model and work-study -- a case study of the course of clothing brand identification

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Abstract
Higher vocational education has a clear vocational skills orientation, how to adapt to the network era, research a set of innovative classroom model for higher vocational education, is the main direction of this topic. "Combination of work and study" is not only a way that the national education department requires higher vocational colleges to take, but also a historical expectation of enterprises and all sectors of society for higher vocational colleges under the market-oriented talent training mode.

Keywords
Flipped classroom; Combination of work and study; Course; research.

1. Flipped classroom mode under the current network
The flipped classroom originated from woodland park high school in the Rocky Mountains of Colorado. At first, the teacher would record the course content and upload it to the Internet to help the absent students make up the missed lessons. Khan academy in the United States is a successful case of flipped classroom.
Khan Academy from the United States, which collects more than 3,500 Khan teachers' teaching video through its online library, provides free high-quality education to people around the world. The project, which began with an online video course taught by salman khan to the children of relatives, has spread rapidly from home to school and is even being "flipped", and is believed to be opening the door to "future education".

1.1 Research on occupational competence model
The cultivation of professional quality, the cultivation of professional ability is not only knowledge and skills, including professional quality. Through the post, let students learn to develop good professional quality.
Skill cultivation is a powerful ability endowed by practical courses, and practical teaching in flipped classroom is indispensable. At the beginning of education, teaching was divided into two ways: "noble" and "humble". "noble" was the pursuit of truth advocated by Plato and Aristotle in ancient Greece. In ancient China, Confucius trained students to be "refined, and then a gentleman", without mentioning the practical "work". They find "truth" through dialectical discussion, and work is not important to them "aristocrats". "Humble" refers to the teaching methods of teachers and apprentices, watching -- imitating -- operating, and teaching for the purpose of work, after the family cannot cultivate children's skills. Is through the practice process to complete the teaching of learning. The clear career direction is the modern higher vocational education mode. Improve professional skills and cultivate good professional ability.
1.2 Research on career-oriented "flipped classroom" model

Combining classroom teaching with vocational ability and network teaching, and carrying out flipped classroom suitable for higher vocational colleges for the purpose of vocational skills is a way to promote efficient classroom. This model is similar to a simulated internship, in which students are divided into groups to form a group required by the position at the beginning of each course to start their "work" for the day. A teacher ACTS as a mentor or boss to push the work along.

For example, "costume stylist" is an existing profession. Clothing collocation is what students are interested in, while the pure theory of clothing brand learning is considered boring by most students. "Clothing brand appreciation course" - China fashion appreciation class, try to recommend a few to students personality difference of age characters, students are required to form a work team as a "clothing modelling division", to the age characters to find a suitable clothing brand (nation "peng liyuan" unique temperament is suitable for the Chinese brand) arouse students' great interest. Through the "costume stylist" professional skills to promote the pre-flip preview. In class, students work with their teachers on "virtual positions", and then judge and grade each other.

2. Research programme

2.1 Key and difficult points:

Key points: classroom can effectively flip the premise and auxiliary power. Part 3: small class teaching (group practice) to improve students' negative emotions; Enlighten teaching, curiosity is the prime motivity that induces learning; Knowledge is connected, knowledge becomes a combination of toys. The third part is the foreshadowing of flipped classroom. Part 4: vocational skills upgrading, cultivating good vocational ability; Professional quality training, clear job requirements, and improve students’ desire to participate. Part 3 and part 4 are the key to the normal operation of the project, so the effective flipped classroom mode. Set up the combination of 3 and 4. The research focuses on the classroom mode that combines traditional classroom, online classroom and flipped classroom with the characteristics of vocational students.

Difficult points:

(1) Establishment of "networking +" module for technical difficulties. Uploading resources by mobile phone and sharing them to students for preview requires the cooperation of software technicians, and the personnel and technical funds are limited. The resources currently available do not meet the need for flexibility in the curriculum.

(2) The difficulties in class lie in the "small class, grouping" and "skills" in 3 and 4 of the figure above. "Small class and group" can understand the psychological characteristics of the students in the class, correct their negative emotions in time, and help them supplement the knowledge they lack in completing the project. "Skills" refers to the accurate setting of "virtual posts". The project requires students to be employees of "virtual posts", so the post setting and post responsibilities should be clear and accurate. Teachers should control the overall situation in the process of turnover.

2.2 Main objectives:

Through post virtualization, basic knowledge learning and search, and class discussion on new class organization mode, vocational flipped classroom is established.

"Internet +" teaching is not limited by time, place and examination. Students can repeat what they learn at will and their learning level can be recorded in the APP. Bring the content learned in advance to class and discuss with the guidance of the teacher. Such discussion can not only effectively improve the learning efficiency of basic knowledge, but also "exercise" the creativity of the brain. The course is a process assessment.
3. Basic thinking methods and research programs

3.1 Basic ideas of the research

(1) This subject starts from the disadvantages of traditional classroom, finds the historical background of the establishment of orthodox education (traditional education), and the original purpose of establishing orthodox education. Study the modern society and the establishment of orthodox education social development, find the orthodox education after the classroom model.

(2) With the foundation of network classroom, modern colleges and universities have launched a variety of network classroom, and the "high-quality courses" and "resource base construction" have been completed or are in progress. In the subject study, it is the cornerstone and foundation of flipped classroom.

(3) Finally, in combination with the employment positions of higher vocational students, students, under the guidance of teachers, devote themselves to the "virtual post" group collaboration to complete the "work", and try to transform the classroom mode with vocational skills as the guidance.

3.2 Curriculum and program

Before the beginning of the course, a sample is given to analyze the characteristics of the course in combination with the clothing brand. There are five steps.

(1) Design and make course modules to enable students to understand the basic knowledge of clothing brands through independent learning.

(2) Sample vocational skills for online display and offline practical operation. After returning to the classroom, I will use practical problem techniques to mobilize students' enthusiasm, guide them to think about relevant problems, and discuss and summarize in groups. First, lead the students to analyze the personality, skin color, body shape and other personal factors of consumers. Second, select the clothing brand suitable for this consumer among the clothing brands I have learned, and discuss and summarize in groups; Third, the teacher and students discuss the correct answer of the sample.

(3) Answer and evaluation. Although the answer is given after the completion of each group, but in the case of "clothing brand identification" course.

The first example takes the example of a real life situation where the correct answer has already been produced and the answer is "objective existence". After the group discussion, the students refer to the answers to decide whether they are right or wrong.

The second example involves a real-life customer, so the virtual customer's answer can be counted as the initial answer. There are multiple groups in the class, and the answers will be multiple, so it needs to be discussed and evaluated by students and teachers, and the final answer will be given in the form of vote. Neither answer was given by the teacher.

(4) Results and evaluation

The first example turns out to be something that already exists in reality. The second example results from virtual customer and student satisfaction tests.

From the historical origin, the network classroom is the foundation, through the classroom real effect test. The design of the whole mode is that students are "listening" to "doing" actively, looking for various brand materials to see the video characteristics of each brand, "using their brains" to analyze work tasks, and teamwork to complete the "work". It is a new vocational ability-oriented flipped classroom model.

4. Combination of work and study

The combination of work and study is the remarkable characteristic of talent training mode in higher vocational education and the core idea of higher vocational education. "Some opinions of the ministry of education on comprehensively improving the teaching quality of higher vocational education" clearly put forward in the document: we should vigorously promote the combination of work and
study, highlight the cultivation of practical ability, and reform the talent training mode. With the further development of higher vocational education in our country, higher vocational colleges have made it a new breakthrough to carry out the training mode of combining work with study. Under the training mode of combining work with study, case teaching method has been widely used.

4.1 Case teaching method
It has been proved to be a very effective teaching method abroad. Harvard business school has achieved great success in case teaching and has cultivated a large number of talented senior management talents. The school has taught in more than 1,000 cases over the past two years and has produced a fifth of the nation's 500 largest business leaders. They run their business brilliantly and attract the attention of the educational circles. Case teaching method has stepped into the modern teaching hall since then. More and more schools begin to pay attention to and implement the case teaching method.

To truly realize the "combination of work and study", those specific functional courses that directly face fixed positions of enterprises and train specialized staff for them must take the lead in realizing the "combination of work and study". Such specialized courses, which are rare among many professional courses, cultivate specialized technical talents who are familiar with quality laws and regulations, master quality planning, quality control and quality inspection methods. Compared with other majors, it is considered to be a traditional major lacking in practical teaching. It explores a way of teaching reform of "combination of work and study" to provide demonstration for several other courses with similar specific functions in the specialty, so as to remove the label of "lack of practical teaching" and "tradition" from the profession and achieve the overall "combination of work and study" of the specialty. This is the significance and research value of this topic.

4.2 Research objectives
Make the classroom teaching in the many courses, take the lead in achieving the "combination of work and study", and summarize the experience, set a model for other specific functions of the professional curriculum.

4.3 Research contents
Survey the enterprise, reorganize the knowledge and skills in the course according to the results of the survey, and establish modular projects; At the same time, bring in a lot of field operation cases, pictures and video data. This is the first step - from the enterprise to the classroom. Contact the enterprise personnel participating in this project to conduct classroom discussion or guide the experiment and practical training (the knowledge and skills involved should be learned before, here is mainly to let students know how the staff understand and apply these knowledge and skills). This is step two -- again, business to class. Finally, after students master the basic knowledge and skills, contact the enterprise staff to arrange on-site classroom teaching, and the teacher will accompany the explanation or the enterprise staff to explain. And send individual students to post practice, back to school to make internship report and speech. This is step three -- from the classroom to the enterprise.

4.4 Main views
Classroom teaching must be combined with the actual work of the enterprise, as close as possible to the distance between the classroom and the enterprise. Enterprise personnel know best what the enterprise needs and how to do things; It is beneficial for teachers' business growth and students' professional study to let enterprise personnel speak by examples. If there are some outstanding graduates working in the positions related to this course, it can best tell current students what knowledge and skills they should master in the school.

4.5 Innovation
Organize courses as required by the enterprise; Invite enterprise personnel to participate in the project, and classroom discussion and guidance; Among the three invited employees, two are representatives
of graduates who graduated from our school in previous years and worked in positions related to this
course.

4.6 Research ideas
The site is the best teacher, all classroom teaching around the investigation of the site needs to be
carried out, so that the enterprise in the course what requirements, classroom also how to arrange. Let
the enterprise come to the classroom, also let the classroom go to the enterprise, realize zero distance
contact between classroom teaching and the enterprise site.

Step 1 -- enterprise to classroom: survey the enterprise, reorganize the knowledge and skills in the
course of "quality management" according to the results of the survey, and establish modular topics;
At the same time, bring in a lot of field operation cases, pictures and video data. The second step --
is still the enterprise to the classroom: contact the enterprise personnel who participate in this topic,
to the classroom discussion or to guide the experimental training (the knowledge and skills involved
should have been learned before, here is mainly to let the students understand, how the enterprise
quality staff understand and apply these knowledge and skills). Step 3 -- from classroom to enterprise:
after students master the basic knowledge and skills, contact the enterprise staff to arrange on-site
classroom teaching, and the teacher will accompany them to explain or the enterprise staff to explain.
And send individual students to post practice, back to school to make internship report and speech.

5. Conclusion
Vocational ability training is the characteristic of higher vocational education. When students enter
the school, they will have clear career objectives. School teaching sets professional training standards
on the premise of regional economic development.
Combining vocational skills training with flipped classroom and teaching through APP module,
"efficient" learning can be achieved in higher vocational classroom. Summarize the "Internet +" classroom mode suitable for higher vocational students.
Through "example" teaching, students are trained to think and analyze independently on problems,
as well as the ability of teamwork. Finally, with this new talent training mode, the goal of innovation
and entrepreneurship talent training can be achieved.

Acknowledgements
Project fund: wenzhou polytechnic 2017-2018 school year "13th five-year plan" education and
teaching reform project (WZYzd201815).

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