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Methods to Improve the Teaching Effect of the Professional Course of the University

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Abstract

Aiming at the poor teaching effect of professional course in university, student interest is not high and show how to improve the important measures of the teaching effect of professional course in university and universities, starting from the view of teachers, effective preparation is the prerequisite to improve the professional teaching, effective classroom teaching is the effective guarantee to improve the teaching of professional course, advanced teaching methods is the fundamental guarantee to enhance the teaching of professional courses, starting from the perspective of students, learning interest is the basic power, improve the teaching of professional courses ability is the fundamental aim of improve the teaching of professional courses.

Key words: Teaching effect; Professional courses; Advanced teaching methods

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INTRODUCTION

University is the main position to carry out quality education and vocational education, the teaching effect of professional quality directly affects the success or failure of the vocational education, along with the advancement of a new round of curriculum reform. Only a strong established professional course reform new concept, is committed to improving the efficiency of classroom teaching, to improve students' comprehensive quality, in order to implement the quality education and vocational education in the real sense.

1. EFFECTIVE PREPARATION IS A PREREQUISITE TO IMPROVE THE TEACHING OF COURSES

To study the teaching material carefully from the students' professional practice, reasonable teaching content is chosen. At the same time, as far as possible to achieve the theory and practice to improve students' learning interest. For example, when speaking of the concept of "Lambert" in the *Shimmer and Infrared Imaging Technology*, students from a literal understanding of this concept, but in the act have never seen such a radiator (Du, 2000; Ji, 1999). In the actual optical design, it cannot be used. If the teacher in the teaching process put this concept in the optical system, it will improve the students' interest.

According to the characteristics of professional knowledge and the actual situation of students' employment, how to highlight the key points of teaching, how to break through teaching difficulties. Such as the *Shimmer and Infrared Imaging Technology*, in the "LLL TV system" chapter, students cannot image the system of LLL TV, so we can fully multimedia playback working process of LLL TV system and the environment.

(a) Understand the students' cognitive law, fully understand the students' knowledge of the professional knowledge, and choose the "point of entry".

(b) Choose the teaching method which is suitable for the students to study the method, for the teachers themselves and the knowledge characteristic.

2. EFFECTIVE CLASSROOM TEACHING IS AN EFFECTIVE GUARANTEE OF TEACHING COURSES

The classroom structure is the distribution of each link, the order of the teaching and the teaching process in time.

2.1 Simplify all Aspects of Classroom Teaching

There are some links in the teaching of professional courses, such as the teaching and consolidation of new knowledge. But some teaching is not essential. Such as some knowledge and the old knowledge linked too closely, review dispensable, review old knowledge link to resolute attitude to save; Some new knowledge in the process of reviewing old knowledge will naturally bring out the, if then insert "Introduction to new course" this link will appear curt will disturb the students' thinking straight, dispersing the students' attention and then inducts the new class is redundant, then we must save inducts the new class the teaching link; if in a lesson students learn very well, to understand and grasp this lesson was to learn the knowledge and the bell has rung, can also put a full summary of the course of ellipsis.

2.2 Adjusting the Teaching Time

Traditional classroom structure is the new knowledge teaching as a teaching focus, in addition to the link of classroom teaching have clearly defined, also have specific requirements for each teaching link time allocation. But the time of the students' effective learning is not fixed, because of the age, because of the different levels of classroom teaching. Therefore, in the classroom teaching of the review and the new time is a reasonable and flexible adjustment.

2.3 Interspersed With Training in Various Aspects

Usually the classroom teaching on training arrangement is generally used for centralized processing method, the first half of the teachers to explain, in the latter part of the concentrated training, this arrangement has obvious disadvantages: students to learn new knowledge due to the lack of timely training and does not reach the designated position, directly affect the students on a subsequent knowledge learning. So the classroom training should avoid focusing on the practice, to put the training into the process of classroom teaching. For the Shimmer and Infrared Imaging Technology, if the teacher a taste of the" spoon feeding "in class describes the composition and technical parameters of each system, students passive acceptance of information, easy to cause the students mind wanders, after listening to half a day to hear anything. We can train the way through experiments. So that the students can be through experimental training to understand the various system functions and technical indexes, but also can real-time feedback students for the

degree of master of professional knowledge, the teacher can discover where students are weak and take remedial measures.

3. ADVANCED TEACHING METHODS TO IMPROVE THE UNDAMENTAL GUARANTEE OF TEACHING COURSES

The quality education and the vocational education and the examination oriented education are different, can not completely copy the examination oriented education method. The education method of quality education and vocational education should have its own characteristics. According to many years' practice, it has been proved that improving the teaching quality of the professional course is the fundamental guarantee for quality education and vocational education.

3.1 Guide Teaching Method

Guiding teaching method in the teaching of professional course is the so-called induced inquiry teaching method. It changed the examination oriented education "cramming" education to guide law education. Here, the role of the teacher is not only reflected in how much knowledge to teach students, and more reflected in guiding students how to learn knowledge, that is, to change the teaching of fish to teach people to fish". Therefore, in the process of teaching, teachers should change teaching is induced, students should learn to think, also is the teacher in the teaching process should actively take the initiative to create a harmonious environment, in order to achieve the dominant position of the students, teachers can through induction, promote the students to think independently, take the initiative to explore knowledge. This education law is especially suitable for students at Open University.

3.2 Individual Teaching Method

Low quality of students and weariness, the achievement gap is in recent years university teachers generally talking about the topic, I refer to the detection, guidance and control technology 0902211 class students of the archives, in the highest scores in the university entrance examination among them for 689 points, the lowest score for 469. These low reflect not only in students with poor results, but also reflects the overall quality of the students is low, weariness, class often sleep not to wake, see the phone even trouble makers, teacher in teaching process need to take out a considerable portion of the time and maintain classroom discipline, supervise and urge the students weariness, inevitable cause classroom teaching content compression, the degree is too easy, leading to some excellent students do not have enough to eat and distract, and breed discontent. If harmful may also cause this part of students satisfied with the status quo, selfmotivated lower. This phenomenon is common to all classes. In the face of this situation, it is necessary for us to carry out the teaching of different levels.

Ancient educator Confucius put forward the "individualized" education principle includes the "level teaching" the education thought that according to the specific situation of the students' abilities, personality, interests and so the implementation of different education. Modern education idea in the sub level teaching not refers to different skills grant to different objects, but in teaching the same subject to different levels of education granted different levels of proposed requirements of different degree, to achieve a better finish the teaching task of teaching methodology.

In the teaching of professional courses in 100 minutes, the teacher no longer blindly on the same degree of difficulty, but according to the lesson of the teaching content, in accordance with the requirements of the syllabus used most of the time there are plans to teach basic knowledge, and inform the students of different levels need to grasp what, then twenty or thirty minutes left the time for the students of different levels of student counseling: put forward some improvement of the problem, guide them to think independently; on average they guide the comprehensive review of the knowledge, summed up the poor students; guide their reading materials, firmly grasp the basic knowledge of the key content, do know the score.

Such as the detecting guidance and control technology professional courses the gleam and infrared imaging technology ", in the study of LLL TV system, learning good students can he put forward a higher requirements, and complete the design of each part of the LLL TV system. For some accept poor students can let him learn the instrument use and technical index. In this way, all levels of students can have a harvest, not in the classroom to do nothing.

Teaching is a technology, it is an art. Let students accept the best quality education is the starting point and end result of every educator. Only firmly establish new curriculum ideas, as far as the students, to cultivate students' practical ability and innovation ability is the fundamental purpose of teaching, and continuously explores new ways of professional course learning methods and teaching methods, in order to obtain the maximum benefit in the classroom teaching.

3.3 Innovative Teaching Method

The so-called innovation is not rigidly adhering to the existing knowledge, science, technology, and other aspects of the theory and system frame. We in the professional course teaching implementation of innovative teaching method, is to inform the student, first of all to learn rules of course, master professional knowledge, because this is the accumulation of their ancestors or other direct experience, is the truth, but we should not rigidly adhere to all this, because professional knowledge with

deformation potential in the constantly updated. We often say "all the time and place for the transfer", that is, there is no change in the world, whether it is natural science or social science. Innovative education law requires that we must first master the basic knowledge of the professional knowledge, on this basis, we should boldly doubt, bold hypothesis, bold innovation. In the teaching of professional courses, the implementation of innovative teaching method, the first teaching material should be innovative; second, teachers should be good at using innovative thinking to inspire students' innovation spirit in the teaching process.

3.4 Discovery Teaching Method

It is found that the teaching method requires the educators in the classroom teaching process, to be good at observation, and found the flash point of the teaching object. In fact, we teach each student body have a flash point, as long as you carefully to explore, it will be able to find. We want to use the discovery of education to capture the students' flash point, once caught, we want to "light" it, make it brilliant. If we do this, we will be successful in the teaching of professional courses. In fact, we in the process of class teaching should follow the principle of teaching students in accordance with their aptitude, the premise is what we are going to will use the discovery teaching method to find one of the "materials."

3.5 Project Teaching Method

Project teaching method is refers to the traditional subject system of knowledge content to transform into a number of teaching projects and around the project organization and teaching and enable students to directly participate in the whole process of the project of kind of teaching methods. Our specific approach: first of all, teachers and students through joint implementation of professional course teaching in a complete project to carry out teaching activities; secondly, students under the auspices of the teachers in the form of group cooperative work self organize to complete the project, so the learning process become a everyone involved in the creation practice, pay attention to is not the final result, but the completion of the project. At the same time with students at the center, give full play to the teacher's role in assisting.

For the project teaching method, the key is how to select the appropriate project; secondly, to create a learning resource and collaborative learning environment; finally, to students completed project to evaluate the learning effect of the students of professional courses. So in the course of project teaching, teachers and students must grasp the following six aspects of the design elements of the project teaching method.

a) Situational elements: teachers and students to create project context.

b) Task elements: "learning unit", the integrity of the task.

c) Organization elements: group cooperative learning or class cooperative learning.

d) The elements of process: "the simulation process of the implementation of the project."

e) The resources: "default resource", information literacy.

f) The evaluation factors: learning outcomes expression should be diversified.

4. LEARNING INTEREST IS THE FUNDAMENTAL DRIVING FORCE TO IMPROVE THE TEACHING OF PROFESSIONAL COURSES

As the saying goes: "interest is the best teacher", "know, better than the good; well, as music". After entering university has to learn professional courses of more than a dozen doors, multi course, wide-ranging, and class is boring and difficult to learn, the students all of a sudden it is difficult to adapt, therefore, as a professional teachers an important work is to pay attention to the cultivation of students' learning interest (Zhou, 2002).

(a) The purpose of making a clear study of the students is important to the course. With a clear purpose, students are not afraid of learning difficulties, there is a driving force for learning. As I was in the introduction of Twilight and Infrared Technolog, the Twilight and Infrared Technology is the study of what?" The students have a variety of answers, and then I put some military decrypted video, ask the video of the night vision night vision instrument used to do? Why can you use it in the night? Why infrared imaging system can get infrared image? Classmates heard these and their life is closely related to the problem, all of a sudden to interest, in the gleam and infrared technology, first class, the first to come up with Twilight and infrared technology, let the students give themselves and their classmates who take infrared photos, in the face of such a complex system, the students ask each part function and composition, which can in principle, explain the composition and function of the system, and then introduces the performance parameters of system, and its application scope and method of use, even some students on the optical system imaging is also very interested. Students to the interest, no longer regard learning as the hard work.

(b) With a flexible and varied teaching method, to keep the students interested. A person's interest is difficult to maintain a lasting, students learning are the same, which requires teachers to pay attention to the use of flexible and diverse teaching methods to develop students' new learning interest. For example, talking about the "CCD camera control experiment course in middle and high altitude area", can put the teaching content into students play a design, given different control parameters, let the students to design their own simulation control system, to see who can design of simulation system, able to control the aviation camera, check and shoot one of the students, not far behind, one to design the simulation of different control schemes, discuss its feasibility, in the race each other in the atmosphere, soon to complete the task of teaching, in addition, can also use discussion method, visiting method, watch the video of different teaching methods, teaching methods varied and vivid, keep the learning interest of the students.

(c) Pay attention to the cultivation of the catalyst for the interest of the students and the relationship between teachers and students. Many students come to have such experience, if the students like the teacher, then the teacher's lesson is easy to learn. So as a teacher should do a teacher, continue to improve the operational capacity, love, care for the students, and students to establish good relationship between teachers and students, so students will like you this teacher, naturally would like you to teach this course (Zhi, 2003).

5. THE ABILITY OF THE TRAINING IS TO IMPROVE THE BASIC PURPOSE OF PROFESSIONAL TEACHING

5.1 Pay Attention to the Cultivation of Students' Learning Ability

The famous biologist Charles Darwin said: the most valuable knowledge is "knowledge about the method", Darwin sees solutions already has been widely recognized. Was done statistics, is a university graduate, he in the university knowledge occupies the further knowledge of about 10%, the remaining 90% to pull over to the side of the road while working learning to obtain, Moreover, we have quite a few students on the university not a lot of opportunities. Therefore, as a teacher is to note the teaching learning methods to students, is the "delegate to fish than to teach him to fish". Such as in the teaching of Engineering Mechanics, on the basis of planar mechanical and guide students to self-study space mechanics, let them mechanical space and plane mechanics have what relation was found in the study, how the complex spatial mechanics into a simple planar mechanical problems to research, according to the content of the course, teach students to use a variety of professional reference books, such as Hardware Manual, Mechanical Design Manual, let students as future encounter any problems, access to what information, reads the manual. In the self-study if encounter difficult to chew on the "bones", how the circuitous tactics, "give up" of this "bone, look directly at the conclusion, to see the results, directly apply the formula, eventually can also achieve the purpose of our study.

5.2 Pay Attention to the Cultivation of Professional Quality

Each major has a lot of related courses, these courses will be for the professional course of study and future work to lay the foundation. So teaching should requires students to learn each lesson, ensure have certain professional knowledge and on professional skill level should pay attention to, such as mechanical professional students Turner or pliers skills should be 2-3 grade level, the planning, milling, grinding, drilling operation should also be had an inkling of the first and second, should also be to strengthen students' ability of designing, such as process design, component design capability. With a certain degree of professional quality, regardless of the students after graduation stem what type of work, can quickly adapt to the working need, can further learn deeply and designed and do a good job (Xia, 2003).

6. ACTION GUIDANCE TEACHING METHOD

The nurtured purpose in university is to major in primary, junior practical and technical talented persons, make students grasp definite knowledge. With certain skilled professional technology form comparatively stronger position adaptable ability and position transforming ability, satisfy students' job finding needs after graduation. However, the common and used teaching method during long period has already not adapted the needs. Compared to the traditional instilled teaching method, the obvious character of "Handel Lerner" is to teach students how to learn and master the ways, other than to make them learn the fixed knowledge. In the limited school education, what we think about firstly is how to teach students learn knowledge and ways other than what to teach them, just as the Chinese proverb: "Gives the human by the fish to be inferior gives the human by the fishing". We set about from the professional courses reform in university, probed into the concrete appliance in teaching and its effects, showing students' main body functions, improved students' overall quality with completely-new teaching characteristic style and features. It provided some plain opinions to the professional courses' reform in university

7. PROJECT TEACHING METHOD

With the guidance of principle of improving abilities, The modern vocational education is, by fostering the students' comprehensive skills and overall qualities, to satisfy the enterprises' demands of talents. Along with the new curriculum reform, Project teaching method is gradually used in some professional courses in our school. Based on the fact of the difference in students' Knowledge but the equal potential in completing practical works, and according to theories, we studied and practiced the project teaching method during the classes of Webpage Design and Production. According to which, we designed two classes of "Teacher's Day Greeting Card Webpage Designing", "Homepage of Mountain Lao", which showed that the project teaching method realized our expectations on improving students' interest and comprehensive quality. Through the analysis of the project teaching method in the class of Webpage Design and Production, we come to the conclusion that, by creating a real situation, the project teaching method can aroused the enthusiasm of students effectively, and by making the students cooperate with their team members, it improve the students' professional abilities and comprehensive qualities. This teaching method can realize the teaching aims of vocational high school so as to solve the problem of employment. In short, the project teaching method is suitable for the teaching of computer major in vocational high school and has considerable positive impacts.

Particular problem is as follows:

The first problem is demonstration of the topic including the background, research methods and content, the research significance, the domestic and foreign relevant research situation and other issues. The second problem discussed the project teaching theory basis and connotation about basic theories. The third problem is the elements and implementation analysis of project teaching which mainly analyzes the elements and implementation process, probes into the principle and composition of the teaching process, and demonstrates some specific announcements during its implementation. The fourth problem is the practice of the project teaching method in the Webpage Design and Production class. We designed teaching plan and used two teaching cases according to that plan to illustrate the project teaching methods and then analyzed the data of the experiment.

8. METHOD OF MULTIPLE INTELLIGENCES THEORY

Based on the teaching ideas of Humanist and of Multiple Intelligences (MI), created by an American psychologist Howard Gardner, the thesis first emphasizes the diversity of intelligence, intelligence differences, combination concept under the guidance of intelligence concept, teaching concept, evaluation concept and students view. These concepts had a strong impact on China's traditional teaching cognitive system and evaluation system. In this study, the author made great efforts to explore more rational and advanced classroom teaching model in terms of teaching strategies research, according to the author's vocational teaching experience in order to improve teaching efficiency and quality (Huo, 2003).

Vocational education has derived inspiration from the theory of multiple intelligences, the extent to which the author does the research on feasible analysis at the level of teachers, students, and teaching evaluation. This paper reports on the urgency and importance of application of MI in vocational education compared to the traditional educational theory. In this study, the author investigates current teaching strategies of higher-vocational electricity engineering, professional characteristics, students' situations and negligence on the area of vocational education (Lazear et al., 2003). The study is designed to carry out a range of data for statistics.

Under the guidance of combination of the theory of multiple intelligences and educational theory, It introduces detailed, comprehensive description of the five types of professional teaching strategies: (a) "crew interactive" teaching strategy: Regulation of teacher-student relationships and interactions constitute harmonious teacher-student interaction, individual student interaction, learning individual and teaching intermediary interaction in an attempt to strengthen the interaction between man and the environment, to produce teaching resonance, and to improve the teaching effectiveness in a context of the teaching structure model. (b) "learn by doing" refers to teaching strategies are designed to fulfill the specific teaching objectives in terms of teaching process, based on subjective and objective teaching conditions, which teachers and students work together to complete teaching tasks creatively and efficiently by using their minds. (c) "random access" teaching strategies that learners can freely get access to the same teaching content through different ways in order to gain the awareness and understanding of this teaching structure model from different aspects. (d) "Inquiry" teaching strategy is to find the cause of development and the connection in an attempt to find out the principles, to form their own concept. As we know, in the context of the inquiry-based teaching process, the paper emphasizes students' center, self-awareness, intellectual capacity, especially abstract logical thinking ability can be strengthened and developed. (e) "Project" teaching strategies: The students themselves carry out the whole process of a project under the guidance of teachers. In the process, students learn to master the teaching programs of the teaching content. Some students or all of them participate in the organization and arrangement of learning behavior, solve the difficulties encountered in the projects so as to improve the students' interest in learning, motivate the students' enthusiasm naturally.

Theory is a guide to action. At the level of many years' work experience, the author hope to offer more beneficial space for the development and reformation of education. That's the unexpected surprise.

9. BEHAVIOR-CONDUCTING TEACHING METHOD

With the in-depth reform of vocational education and the establishment of practical teaching system, the focus of people's attention is increasingly concentrated on the teaching process, more accurate to say that it is focused on the choice of teaching methods and improving. That is, how to improve teaching methods in order to effectively improve their overall quality, comprehensive ability to effectively enhance students continue to develop their own potential and the ability to adapt to the market.

To achieve the object and research the teaching method fitted for the new era, taking modern education concept rationally into teaching process as well as reforming class organizational form has been the one of emphases and keystone of the vocational education teaching reform. At present, the importance of the method in behaviorconducting has been recognized by vocational education staff and increasing vocation technical education institutions have been intentional using it. There are two reasons for this phenomenon, one is for cultivating socialism new person adapted to new century modern construction. The other is to achieve the teaching object for cultivating technician who has the ability to manage and operate the product line.

The modern enterprise asks various requirements of the personnel, the employee needs to have management ability, responsibility ability, self work ability, group work ability, technical ability and social intercourse ability. The vocational school should educate students according to the corporate requirement. But in view of the enormous drop of the students"s source of the vocational education school, the students' enthusiasm of learning skills has greatly descended. The traditional fundamental knowledge training method that emphasize students practice assistant instruction is difficult to stimulate the interest of the study as well as can't undertake the important assignment of vocational education. Therefore, industrial technology school of Suzhou industrial park tries to adopt behaviorconducting teaching method in theoretical and practical teaching activities. Via making innovation in teaching method, achieve the best result in teaching effectiveness and learning capability.

Some new teaching methods such as behaviorconducting teaching have been tried in education. It has been implemented in Mechanical and Electrical theoretical and practical teaching curriculum, comparing the feedback from students' status and the general consequences. It can be possible to conclude that adopting the behavior-conducting teaching method is more suitable for students' study and mastering and applying knowledge. In the process of learning knowledge students can study combined with pleasure, students can interact in the whole process so that make the utmost effect of students' principal part. Students study knowledge in the form of the group learning method so that makes best for developing students' intelligence and improve the production practical effect.

CONCLUSION

This thesis is a systematic study of simulation teaching method applied on major courses in secondary vocational schools. The thesis points out simulation teaching can enhance student's learning interest and confidence. Improve students' comprehensive occupational abilities and offer students a good learning environment as this teaching method is subjective, applicable, reactive, creative and situational. And simulation teaching should observe four principles, which unite environment and economy, combine vocational teaching and thought, put teaching forms and content together and associate the role of teachers with the part of students. Theoretically simulation teaching is based on three principlessubjectivity, practice and direct observation. This teaching method is indispensable to be applied on construction course in a secondary vocational school and it has achieved a lot. It has promoted the school's development, aroused teachers' enthusiasm for teaching and research, increased students' learning conf dente. However, there are still some problems hindering the application of the teaching method as the method requires sufficient teaching equipment, enough qualified teachers, standardized teaching, the combination of teaching and information technology and other related aspects (Pi, 2004). Therefore, when applying the simulation teaching method a secondary vocational school needs to pay attention to many elements. The school should deepen mufti-cooperation to optimize the simulation teaching environment, apply this method flexible to make it combine other teaching methods and strengthen the training of major courses for teachers to enhance the teaching quality. Moreover, the school should attach more importance to the standardization of teaching to ensure its outcome, make the simulation teaching combine with information technology to realize a modern simulation teaching.

In a word, good vocational school of professional courses and professional basic course teaching is indeed not an easy thing, it by the teaching materials, students' quality, social environment, teaching conditions, teachers' qualities factors to limit the influence of, but my experience is as long as to the four aspects above, to work hard, will be able to complete the teaching aim of good professional basic courses and professional courses

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