

The Importance and Realization of Practical Teaching in Vocational Education

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Abstract: Practical teaching is an important teaching organization form, which is an important teaching organization form can stimulate the learning interest and improve the students' ability of observing, analyzing and solving practical problems. Practice teaching is conducive to the cultivation of application ability of compound model talent, including completing the objective requirements of the development of economic society of vocational talents while achieving the basic objectives of the higher vocational and technical education.

1. Introduction

To improve the performance of the students including their rational and practical abilities, we have tried our best to do a lot of attempts, help the students to establish the scientific thing model; do cooperative learning, etc. Cooperative learning is arguably the best example of a contemporary teaching practice with origins that can be traced unmistakably to the work of social scientists. It is the outcomes of theoretical and used study, including a so long time work within the field of social relationships, team powder, studying and effective supervision. Many works were done about cooperative learning models and their characteristic aspects and how to make this teaching-studying style fit different contexts, subjects, and the group consisted of various learners who represent one of most vivid, positive, and fertile areas of systematic requirement in education.

2. Seven types of behavior are aimed at in the biological science course

The first type of behavior is to develop understanding of important facts and principles; As we mentioned above, frequently we used cooperative learning model to make the students understand important facts and principles. Through the experiments ever made using the drafts that sought information about how teacher grasped this matter and their experience with this instructional strategy. Teachers spent a lot of time and energy to make it clear that how students would respond to the way they were asked, in which way the students would seek their answers, then try to find appropriate amount of information teacher provided in their responses. Teachers can not make any conclusion and unpleasant or unsatisfied expression in the class, the rest work after class for them to do was to find a more proper way to improve the results of communication between the students to clarify ambiguities, pursue lines of question, and assist us in approximately right decisions.

The second type is to develop familiarity with dependable sources of information. Then how can we comprehend the information from different sources, the answer may be learning from both sides, they would generate constructive involvement, social learning, and personal experiences as learners. We do really find a nexus of associated ideas.

For example, teachers in the vocational college were always graduated from comprehensive universities, sometimes they could not know their students, because these group of students they confronted with had their own thinking models and express models while the ways they used were not standardized, this is a matter we should pay more attention to, otherwise, we won't find an effective way to achieve a better performance.

The third type is to develop ability to interpret data. This aspect, according to my opinion, if you wanted to interpret data, there are certain amount of work should be done ahead. You should know the principle of the matter, then know how to apply this principle by several examples shown

immediately after the explanation of the principle. Active involvement should be included as the work should do. A rationale consisted of beliefs connected with active participation in learning. Many teachers told us that cooperative learning is good because it results in broader student participation in lessons, more active learning, or bigger assignment engagement in classroom lessons as a result of being allowed to work together. Normally, the students in the class were not sitting listening to you in a cooperative group. They're doing something.

The fourth type of behavior is to develop ability to apply principles that are taught in biological science to concrete biological problems that arise in his everyday life. In the class, we always cited as many as possible examples to help the students to understand the usage of a principle, this method was called Case teaching. Then what kind of standards shall we to adopt to select the examples which related to the topic tightly, deserved to pay more attention to think. Once when I was a student, chemical theory was taught at the sixth semester, teacher rent a bus to take us to the factory belong to Sinopec, where we saw the real scale of the chemical reactors, connecting in the mind the chemical reactions took place in them, at the same time we also thought of the principle we could use for example hydrodynamics of Bernoulli Equation, mechanics of materials, possible chemical reactions and products, how we separate the reacted products, etc. a series of matters would come into your mind when you confronted with the real working circumstances. In a certain period of time, our students were largely and stable needed by Pfizer Pharmaceutical industry within the top 50 powerful companies in the world. Improvement of technical skills and social skills for the teacher should also take into consideration. Before they enter the manufactory, we took them to view the circumstance, invited the officers from human resources department to elucidate the context about the working requirements, and how we should prepare the cognitive function both in technical and social skills. We pleased to see that many student benefit from their social skills, some students introduced their good classmates into Pfizer, some introduced her boyfriend or his girlfriend into the same factory owing to their good social skills, while we were also pity to see the contract result of poor social skill leading to his excellent friend he introduced were informed not to be employed in the end.

The fifth type of behavior is to develop the ability to study and report the results of study. During the abruptly increased number of students in China, we had to admit to educational resources was really spared, and we should spent more consideration into increasing the abilities of students when they worked independently. All the work should be recorded and summarize in working written language, but the real fact was that the students who can play jokes and be talkative, while if you commanded them to write something, the usual result was that major of them would be in a mess. The feedback information from the previous students now worked as a contracted as employees, they did really feel it is urgent to grasp the ability of making a regular working reports.

The sixth is to develop broad and mature interests as they related to biological science, and the seventh is to develop social rather than selfish attitude in this area. Both the sixth and seventh aspects of were the basic fibers that all the students should developed all life along.

According to the above guidance, the practical teaching mode is the combination of the vocational education process and must be integrated into the teaching work.

3. The psychological comprehension of teachers and students mutually

Combining the practice teaching with teaching in class as whole integration organically and intelligently requires the teachers to seek and provide learning experiences more clearly for the students; it involves analysis, interpretation, application to various illustrations to be clear of the meaning; that is, it will involve the kinds of mental operations that lead to a clearer interpretation and understanding. On the other hand, the learning experiences involved in practical teaching should help students to learn how to use the facts and principles, and to understand the problems in the application process, and to understand the actual process of the program is appropriate, then according to the situation of the body to adjust, deepen the students' understanding of the facts and principles, and gradually improve the practice and operation ability.

4. Practical Content

Take Dalian Vocational and technical college majoring in biology for example, we hired part-time faculties from the enterprise with rich first line work and management experiences to teach, to make up for the deficiency and weakness of not timely update of full-time teachers experience. In the daily course theoretical and practical teaching were given alternately to explain the theory and the solution. In the last semester, through college-enterprise cooperation, students could find their first practicing job to start their own career, later on they also could adjust the conditions of employments according to their accumulation of experience and employer's interest, then to choose a career.

The talent training mode of the implementation of the three years, the initial employment rate of students is increasing year by year, the employment rate of the third year has reached 98%, compared with the current economic development rate and the employment rate of undergraduate colleges and universities, this result is gratifying. As a result of the students' goal orientation in the employment oriented talent training ideas, combined with the students after graduation to accept continuing education is not obvious characteristics, specifically for the biological technology related to high skilled person. Due to students' skills in the school has been a great degree of training and simulated practical experiences, they were very popular needed by the pharmaceutical enterprises in Dalian and signed a contract before graduation.

5. Results and Discussion

We have engaged in improving multi-aspect abilities of the vocational students in DLCT for a certain time, it is exploring pathway to probe, to investigate under what kind of hotspot background belongs to this era, would rather modern apprentice system, Dualism in Germany, but also we invited a organically drawn characteristics style of our own. There still a long way to go, but did we have some information to discuss here, sharing the experiences already made.

The employment rate in a certain stage can really reflect the students socially accepted, high employment rate for us according to the existing models to cultivate such talents, but if we consider more employment indicators, such as employment first time length, switch rate and so on, may according to the standard single drawn the conclusion accuracy will be questioned. To test whether a pattern can be beneficial to the students' training of vocational colleges for a long time, we need to have a more objective evaluation method to consider and analyze the statistical results. For the evaluation of the curriculum is very complex, but at least we have reached a consensus on the necessary steps and important steps. We take efforts to enrich the evaluation standards, which were refined from variety of educational philosophy and practice experiences, continue to increase the depth of understanding. We should keep pace with the concept of integrated education, integration of educational resources, and the establishment of objective assessment system for vocational education, combing with teaching practice, to develop the basic objectives of the higher vocational and technical education to contribute this meaningful career.

References

- [1] Ralph W. Tyler.1949.Basic Principles of Curriculum and Instruction. Licensed by The University of Chicago Press, Illonois, U.S.A.
- [2] Adey, P., Hewitt, G., Hewitt, J., & Landau, N. (2004). The professional development of teachers: Practice and Theory. London and Boston: Kluwer.
- [3] Bruce J., Marsha W., Emily C. Eighth Edition (2014). Models of Teaching
- [4] David N. Aspy and Flora N. Roebuck. An Investigation of the Relationship between Student Levels of Cognitive Functioning and the Teacher's Classroom Behavior. The Journal of Educational Reasearch, Vol.65,No.8 (Apr., 1972), pp.365-368
- [5] Mu Jinyan Jiang Lina Cai Zuguo Li Guirong. An Empirical Study of Task-driven Mode in the Experimental Teaching of Plant Tissue Breeding. Journal of Hen'nan Institute of Science and Technology (Social Sciences Edition). 2016, 36(2),106-108