

Study on Practical Teaching Reform Basing on Discipline Competition

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Abstract

The practical teaching is an effective way to consolidate theoretical knowledge and deepen theoretical understanding, as well as an important platform to make students integrate theoretical knowledge and practice, master scientific method and improve practical ability. However, a variety of reasons cause the low position of practical teaching in our country meanwhile the factors like traditional culture, educational concepts, education system and etc make teachers unwilling to go in for practical teaching. By contrast, various levels and kinds of discipline competitions are carrying out in schools like a raging fire. Therefore, the research analyzes the discipline competition in professional teaching, studies the practical teaching reform on the basis of discipline competition and proposes the measures to the reform of practical teaching.

Keywords

discipline competition, practical teaching, reform.

1. Introduction

In recent years, along with the rapid development of higher education, its quality has greatly improved. However, the current quality of higher education still cannot meet the requirement of the economic development in modern society. There exist many problems. Such as the irrational major setup and structure in some colleges and universities, urgently strengthen the practical ability and creative spirits of students, improve the overall quality of teaching forces, change cultivation mode of talents, contents and methods of teaching, as well as others[1]. Hence, we shall take feasible and practical measures to further deepen the teaching reform in colleges and universities and improve the ability and level of talents cultivation, thus better satisfy the requirements of high quality and creative talents in the development of economy and society. Discipline competition is a series of activities that aims to improve students' independent and cooperative working ability meanwhile make student convert theoretical knowledge into practice by the means of competition in disciplines, as well as, enhance students' confidence in study and work by finding problem, analyzing problem and solving problem in practice, basing on mastering the basic theoretical knowledge, some experimental methods and skills after accepting the classroom teaching[2,3]. As the testing part of high-level practical ability, discipline competition has great influence in the reform and innovation of practical teaching and talent cultivation mode. It becomes the stage to compare the teaching quality and the strength of students of different schools to a certain extent[4]. Discipline competition, teaching reform and creative practice combine with each other and become the trinity teaching model that promote the improvement of students' ability[5], the trinity teaching model of discipline competition, teaching reform and creative practice is shown in [Fig. 1](#). For these reasons, it is valuable to explore and study how to effectively launch discipline competition, research the operational mechanism and management mechanism of scientific and normative competition to build a good creative and practical platform for students.

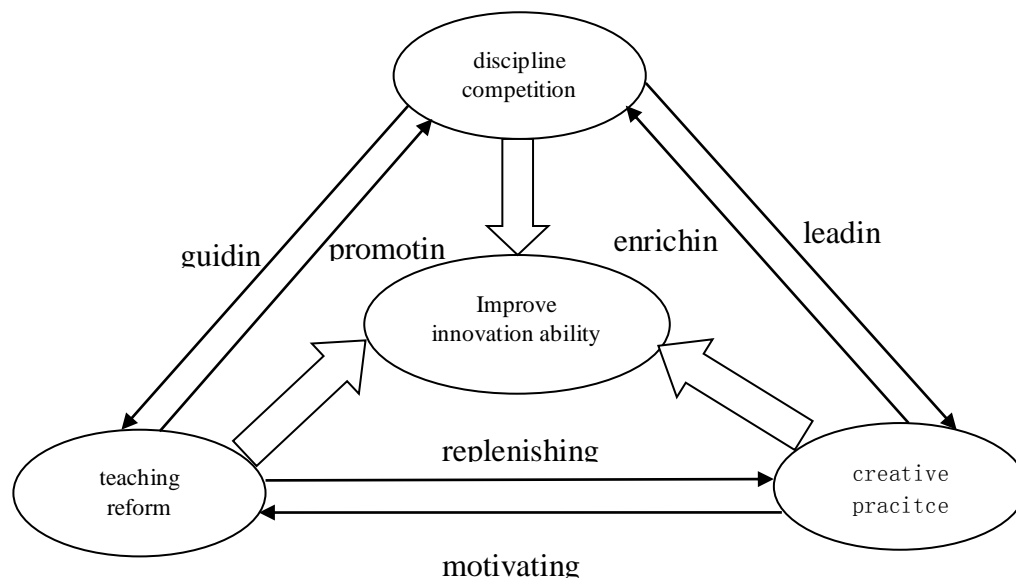


Fig. 1 the trinity teaching model of discipline competition, teaching reform and creatice practice

2. Effects of Discipline Competition in Professional Teaching

Due to the practical characteristic, the discipline competition increasingly reveals its significance in the practical teaching of colleges and universities, which mainly embody in following aspects.

2.1 Launching Discipline Competition Helps Improve Innovation Level of Students

The main objective and direction of practical teaching reform is to improve the practical ability, creative ability and comprehensive quality of students. Discipline competition is a very effective way with strong subjective initiative[6]. It can create the change from “teaching focused” into “ability training”. Students start to study initially, explore knowledge in practice instead of accepting knowledge passively on class and integrate theories and practices in the process of “problem solving”, which completely change the method of traditional study. At the same time, teachers also have some changes. They get out of the old teaching modes like cramming, duck-stuffing and etc[7]. They conduct heuristic, interactive and enlighten-type teaching to make students cultivate creative thinking habits, with the carriers that tutor students to participate into various kinds of discipline competitions.

2.2 Launching Discipline Competition Helps Promote Teaching Level in Classroom

The guidance of teachers is vital importance in the process of undergraduates taking part in the discipline competition. Teachers can know the dynamic state and direction of major and course teaching reform. Combine the discipline competition of students with the scientific research of teachers. On the one hand, take some questions in teachers’ scientific research project as the topic of students’ discipline competition. In this way, improve students’ performance in competition meanwhile assure teachers’ project finish successfully. On the other hand, teachers can absorb the mature creative thoughts and existing results of students. Bring students into group of scientific research to complete the works of students through collaborating with students[8]. Students can participate into underlying scientific research to further improve own innovation ability under the guidance of teachers and the support of necessary money and equipment.

2.3 Launching Discipline Competition Helps Construct Study Style of Undergraduates

Through old students guiding new students, more and more students participate into the discipline competitions ceaselessly that will form a good tradition for learning and build positive learning atmosphere and fine climate for learning. For the past few years, some large enterprises, units and world’s top five hundred enterprises also take part in the undergraduate discipline competition[9]. They inspect students’ ability and some excellent students receive offers from them. In addition, students will attract great deal of concerns of schools and even social media in the process of competition and award commending, which can produce great demonstration effects and influence to

other students[10]. It also is the specific embodiment of the standards and requirements of good study style. It shapes excellent examples as well as forms positive atmosphere and fine climate for learning.

3. Deepen Practical Teaching Reform Basing on Discipline Competition

As an effective way to consolidate theoretical knowledge and deepen the understanding for theories, the practical teaching is the important part to cultivate the engineering and technical talents with creative awareness and high quality, as well as a significant platform to make students convert theoretical knowledge in practice, grasp the scientific methods and improve practical ability. However, the problems like low status of practical teaching in our country, less learning time and etc[11]. Teachers are unwilling to engage in practical teaching due to the traditional culture, educational concepts, educational system, insufficient investment in practical teaching and other factors. The relations of influence are shown in Fig. 2 [12]. Comparing the passion of schools and teachers about discipline competition, we recommend school strengthen the basic discipline competition to deepen the reform of practical teaching.

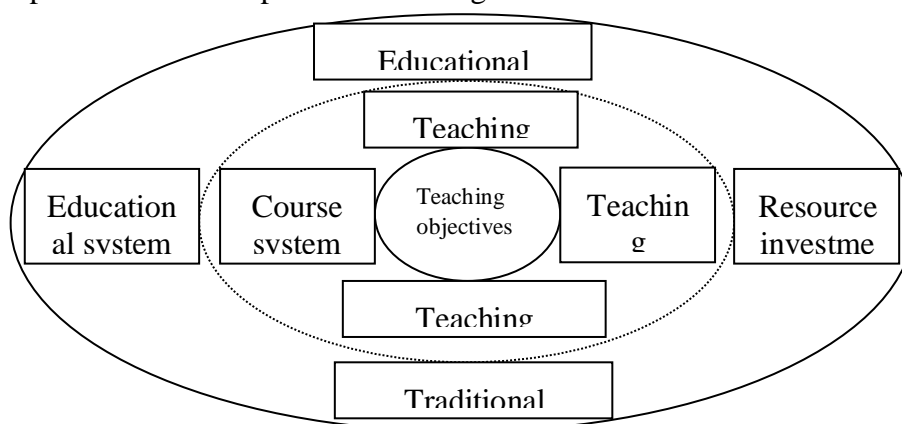


Fig. 2 the relations of practical teaching factor and influencing factor

3.1 Change Traditional Educational Mode and Complete Practical Education Platform

To build thorough undergraduate innovative ability training system, the school shall insist lay equal stress on both theoretical teaching and practical teaching to complete three teaching platforms. The first is the practical teaching platform, including basic teaching practice, professional or comprehensive experiments, autonomous and open experiments; the second is the practical training and practice teaching platform, including Simulated practice training, simulation practice and practical operating; the last one is the innovation teaching platform, including science and technology or social activity program, competition activity or program (mechanical design competition, graphics competition, student innovation funds program), creative works and achievements of startup (scientific research paper, inventions and achievements, patents and other scientific and technological works)[13]. Each platform contains the basic layer, comprehensive layer and higher layer that form a thorough practical teaching platform.

3.2 Advance Reform in Practical Teaching System and Contents of Teaching

The discipline competition is the main part of open contents. The topic of discipline competition can come from actual demands or requirements of scientific research. Through the competition, expand the knowledge structure of students and also the contents of practical teaching to promote the integration of different knowledge structures and reach the combination of study, practice and social demands[14]. The position of the traditional practical teaching is as the auxiliary of teaching. Managers of schools, teachers and students didn't put enough focus on it that cause the phenomenon that relies heavily on theoretical knowledge rather than practical teaching. In the discipline competition, students groups will realize their imaginations or creative ideas by different methods under the guidance of teachers. They will discover problems, explore the solution and solve them in the end by practice[15]. The reform of practical teaching comprises the reforms in forms and contents

of teaching. To the form, the school can change the fixed time schedule and open the experiments in time and space in which provide more chances for students entering laboratory; the reform of content involves stipulated contents and also open contents. Students must finish the stipulated contents and they have more freedom in open contents to implement and realize the creative thoughts in laboratory.

3.3 Take Competitions as Carrier and Promote the Practical Teaching Reform

The construction and completion of laboratory is the necessary condition for cultivating the innovation ability and practical ability of students[16]. In the open laboratory, students can find the problems and solve the problems by independent operation and thinking that help students form own understanding and take full advantage of the positivity of learning and creation. If the condition permits, the school can set the scientific and technological innovation “incubator”, which make the innovation program with strong practical operation ability and good market prospect benefits a lot.

4. Conclusion

It's necessary to build the scientific management institution and assessment system to reform the practical teaching and improve the innovative ability of undergraduates with taking the discipline competition as opportunity. What's more, it also should motivate the positivity of teachers and students participating and promote students' ability to integrate theoretical knowledge and practice. The cultivation of creative talents cannot finish only by classroom teaching. It must combine with practical teaching. In the new mode of talents cultivation, the schools should emphasize on the practical teaching instead of still leaving it on auxiliary position. As one of methods of practical teaching, the discipline competition can cultivate the active thinking, divergent thinking and creative thinking of students, improve the practical ability and the integrated ability of theories and practices, as well as, form sense of competition and team spirit. The results of discipline competition will change the study style in school, bring more chances to startup a business or employment for students, promote the organic integration of theories and practices, advance the teaching reform in schools and the improvement of education quality, thus enhance the quality of creative talents cultivation.

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References

- [1] F.F. Zhao, H.L. Sun, Y. Hong. Research on the role of discipline competition in practical teaching in colleges and universities, *Industrial & Science Tribune*, Vol.10(2011)No.23,p. 132-133.
- [2] S.L. Xu, Q. Chen. Reform of practice teaching based on academic competition, *Journal of Zhejiang Shuren University*, Vol.13(2013)No.3,p.48-51.
- [3] P. Ding. The interaction of discipline competition and practice teaching promotes the cultivation of creative talents, *Education Modernization*, (2015)No.11B, p.60-62.
- [4] Y.N., Zhao, Y.B. Zhang, J. Li. Discussion on discipline competition promoting teaching reform and cultivating innovative practice ability, *China Electric Power Education*, (2014) No. 12, p.131-132.
- [5] X.Y. Huang, Y.P. Wang. On the new training mode of teaching reform under the new situation, *Adult Education*, Vol.33(2013)No.2, p.35-36.
- [6] P. Marais, C. Meier. Hear our voices: Student teachers' experiences during practical teaching, *Africa Education Review*, Vol.1(2004)No.2,p.220-233.
- [7] X.L. Zeng. Discussion on Practical Teaching System for Cultivating Undergraduates Majoring in Economics and Management, *Research and Exploration in Laboratory*, Vol.1(2007), p. 1-4.

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- [8] L. Wang, W.P Lu, Z.G. Wang, et al. Exploration and practice of the combination of discipline competition and teaching reform, China Electronics Education, (2013) No. 4, p.59-61.
- [9] C.B. Lin, S.S.C. Young, T.W. Chan, et al. Teacher-oriented adaptive Web-based environment for supporting practical teaching models: a case study of “school for all”, Computers & Education, Vol.44(2005) No. 2, p. 155-172.
- [10] Y.P Gao, Z.S. Teng, F.H. Li, Z.X. Zhou. Training mode of innovative talents based on combination of open laboratory and platform for discipline competition, Experimental Technology and Management, Vol. 29(2012) No. 4, p.360-366.
- [11] C. van Velzen, M. Volman, M. Brekelmans, et al. Guided work-based learning: Sharing practical teaching knowledge with student teachers, Teaching and Teacher Education, Vol.2(2012), No. 2, p.229-239.
- [12] P.G. Li, X.D. Xu, G.S. Chen. On Practical Teaching of Undergraduate Engineering Education in China: Problems and Causes, Research in Higher Education of Engineering, (2012) No. 3, p.1-6.
- [13] Q. Guo, Y.Y. Wei, Z.H. Zhao, Y.Y. Wang. Taking discipline competitions as support, constructing provincial scientific exchange platform for university students, Experimental Technology and Management, Vol. 29(2012) No. 3, p. 130-133.
- [14] S.B. Li. Driving the curriculum constructs and the student innovation ability raising by the discipline competition, College Mathematics, Vol. 25(2009) No. 5, p.8-10.
- [15] H. Xu, H.Q. Yu, N.F. Cu. Depending on the cooperative platform of college and enterprise to heighten the undergraduate’s discipline competition level, Research and Exploration in Laboratory, Vol.29(2010), No. 12, p. 153-155.
- [16] T.H. Chen, X.M. Wen, L.W. Ge, W. Yi. Developing student’s practical and innovative ability through discipline competition-Take the university student structure competition as an example, Journal of Zhejiang University of Science and Technology, Vol. 20(2008) No.2, p.136-138.