

Discussion and Application of Goal Problem Oriented Teaching under the Epidemic Situation

Jin-long Men^a, Mei Liu^{b*}, Ling-bo Zhang^c, Shi-zheng Huang^{d*}

Abstract: In the context of COVID-19 Epidemic, the education industry across the country has been forced to adopt online teaching. This paper analyzes the changes of education pattern with the perspective of teacher-teaching mode, student-learning mode and mode of school management, and it explains the existence of teaching platform, teaching methods, teacher-student interaction, network status and other issues of large-scale online teaching. This paper suggests carrying out the design goal of teaching problem oriented teaching mode in seven aspects from teaching content design, student academic analysis, courses for ideological and political education design, teaching method design, teaching process design, and teaching quality monitoring. During the process, four levels of talent training requirements are satisfied including courses for ideological and political education goals, classroom teaching goals, curriculum teaching goals and professional training goals. The goal problem oriented mode is implemented in the course of Fire and Explosion for the major of Safety Engineering, which provides a beneficial reference for the reform of teaching mode and the improvement of online teaching quality.

Keywords: COVID-19 Epidemic; Online Teaching; Goal Problem; Courses for Ideological and Political Education

1. Introduction

In 2020, the sudden outbreak of COVID-19 Epidemic has disrupted the rhythm of production and life around the world (Copiello & Grillenzoni, 2020; Hemmati, 2020; Phoon & Chen, 2020). By the end of April, there were more than 6 million confirmed cases worldwide. At the end of January 2020, the Ministry of Education requested that the start of the spring semester would be postponed nationwide and it proposed that the online teaching mode of "suspending classes without ceasing classes" would be launched nationwide. According to statistics, more than 1,400 universities and 950,000 teachers in China have adopted more than

30 courses and technology platforms to carry out online teaching.

By the beginning of April, the number of students participating in online teaching has reached 1.18 billion. Online teaching is the teaching method of education industry had during the outbreak, the emergence of large-scale online teaching will be an inevitably part of the teachers, which are unfamiliar with online teaching, teaching platform crowded, poor terminal hardware, and poor network. Single teaching method, weak regulation, and so on and so forth, it led to the decrease of the teacher's teaching effect, students' learning interest and teaching quality (Wu, 2020; Zhang et al, 2020). Large-scale online teaching is a huge challenge for the education industry, and provides opportunities for the reform and innovation of the teaching mode in colleges and universities (Wang, 2020).

^{a,b,c,d} Guangdong University of Petrochemical Technology, Maoming, Guangdong, 525000, China

*Corresponding Author: Mei Liu,
Email: 879643579@qq.com

Dewey, a famous American educator, believes that all education is born of experience, and that valuable experience contributes to and organizes more facts and ideas: learning from experience links the acquisition of knowledge in school with activities in the course of life (Dewey, 1938). In keeping with Dewey's educational philosophy, Barrows. H. S. proposed the problem-oriented teaching method, which was later introduced into teaching in China and renamed as problem-inspired, problem-oriented and other names (Barrows, 1996). Dr. Katz of the United States put forward the project-based teaching method, which has been widely applied in vocational curriculum teaching (Hong, 1998; Keegan, 2001). The case teaching method proposed by Harvard University is an effective means to organize teaching based on practice (Shi, 1984). The communicative Language Teaching approach proposed by Hymes has become an important teaching method for language teaching (Hu, 1982; Liu, 2020). Dewey's inquiry-based teaching method is a pioneer of modern flipped classroom teaching mode (Liu, 1989). Lozano's heuristic teaching emphasizes the development and cultivation of students' imagination and thinking and it is applicable to all kinds of courses (Li, 1979). During the epidemic, there is literature which put forward suggestions on changing the teaching strategy, improving the teaching design level and the assessment and evaluation methods of the online teaching model (Guo, 2020; Li et al., 2020; Ma et al., 2020).

In this paper, on the basis of existing research, according to professor Ru-jin Zhou who puts forward the target problem oriented teaching, the analysis of students, teachers, mental status, teaching design, assessment evaluation and quality control problems from multiple perspectives such as teaching design should meet the target class, curriculum goal, training objective, curriculum ideological and political education such as multi-level demand, to carry out the goal problem oriented teaching in curriculum design and implementation of the fire explosion, strive to improve the effect of online teaching q

uality and students' education during the epidemic

2. Analysis of online teaching problems

2.1 The change of educational form during the epidemic

Teacher's teaching mode changed. Affected by the COVID-19 epidemic, the teaching mode has been forced to change from traditional face-to-face teaching to online teaching. There are a variety of teaching software, including Tencent Classroom, Tencent Conference, QQ group live broadcast, Rain Classroom, Xuexitong, Blue Ink Cloud class, Ding Talk, Tik Tok live broadcast, etc. The lack of face-to-face communication and interaction between teachers and students makes it more difficult for teachers to grasp students' dynamics and knowledge mastery. In addition, some teachers have insufficient experience in online teaching, unreasonable teaching process design, and the teaching effect is seriously affected.

Students' learning mode changed. The learning mode of students has changed from traditional classroom teaching to online teaching facing computer or mobile phone screen. Poor communication between teachers and students leads to students' inability to fully follow the pace of teachers, ineffective supervision leads to students' distraction, network lag leads to decline in learning interest and a series of problems.

School management mode changed. Under the online teaching mode, it becomes more difficult for schools and teachers to supervise and manage students. The existing management mode mainly includes school teaching supervision, college teaching supervision, teacher attendance, random call, online question-and-answer, etc., which greatly changes the traditional management mode and increases the work difficulty for schools and teachers.

2.2 Analysis of online teaching problems

Limited by the online teaching mode, the following problems exist in the current teaching mode (He et al., 2017; Hu and Xie, 2020; We, 2020; Yuan e

t al., 2020): (1) the transfer of the classroom to the online teaching mode involves many teaching platforms, and some of the platforms have imperfect functions. Teachers are forced to use a combination of multiple platforms for teaching, and some teachers are inexperienced, which affects the teaching effect. (2) Teachers give priority to teaching and are forced to return to traditional spoon-feeding teaching. The teaching process is boring and the coordination between teachers and students is insufficient. (3) The interaction means are simple, rigid, or even without interaction. Students lack interest in learning and their learning efficiency is reduced. (4) It is difficult for teachers to grasp the classroom atmosphere and students' knowledge acquisition due to the lack of real-time response of students, which affects the teaching effect. (5) Lack of effective supervision, easy to occur learning state burnout, mind-wandering and other conditions, learning desire further decline. (6) Online teaching is limited by network conditions, which leads to problems in the teaching platform, such as frequent lag and dropped lines. Some students also have entertainment modes such as "like" and "gift brushing" in online teaching, which affect the normal teaching order. (7) Students mainly use computers and mobile phones in listening to lectures, especially the small screen of mobile phones, which affects students' eyesight; teachers and students in front of computers and mobile phones for a long time, affecting their physical and mental health. (8) Traditional teaching mode is in the collective mode, while online teaching means that students face the mobile phone screen alone, which is easily affected by family, network and other factors. Poor learning atmosphere is also one of the reasons leading to poor teaching effect.

3. Goal - problem - oriented teaching design

3.1 The basic idea of goal-oriented teaching

Goal problem oriented teaching from learning problem design, teaching content design, student academic analysis, courses for ideological and political education design, teaching method design, teaching

process design, and teaching quality monitoring and other seven aspects to carry out the teaching design, teaching design should meet the course education, classroom teaching goals, teaching goal and professional training objectives, four levels of personnel training requirements, goal problem oriented teaching basic ideas as shown in Figure 1.

(1) Objective principle. Teaching process design should reflect teaching goals, which are both the starting point and the foothold of teaching activities.

(2) System principles. The design of goal problem should reflect the systematizations and hierarchy, from the basic knowledge, key points, difficult points, practice, expand content and other multi-level systematic design.

(3) Synthesis principle. The design of goal problem should reflect the requirement of cultivating comprehensive quality of talents, it should pay attention to students' independent learning ability, cultivate students' ability to find and solve problems, and it's supposed to run through ideological and political education in the course of teaching.

(4) Principles of personality. According to the systematic principles of teaching design, the learning of basic knowledge, important knowledge and difficult knowledge has basically met the goal requirements of the course training, while the practical content and expanded knowledge mainly reflect the personalized training of students.

3.2 Goal problem oriented teaching design

Goal problem oriented teaching requires the teachers to have strong professional quality, comprehensive ability and innovative thinking ability. The following is to carry out goal problem oriented teaching design from four aspects: teaching process design, goal problem oriented design, curriculum ideological and political design and teaching quality monitoring.

3.2.1 Teaching process design based on objective questions

The goal problem oriented teaching process is mainly divided into three stages: course analysis, teaching material preparation and teaching process,

and the teaching effect feedback which is carried out by scientific teaching quality monitoring method.

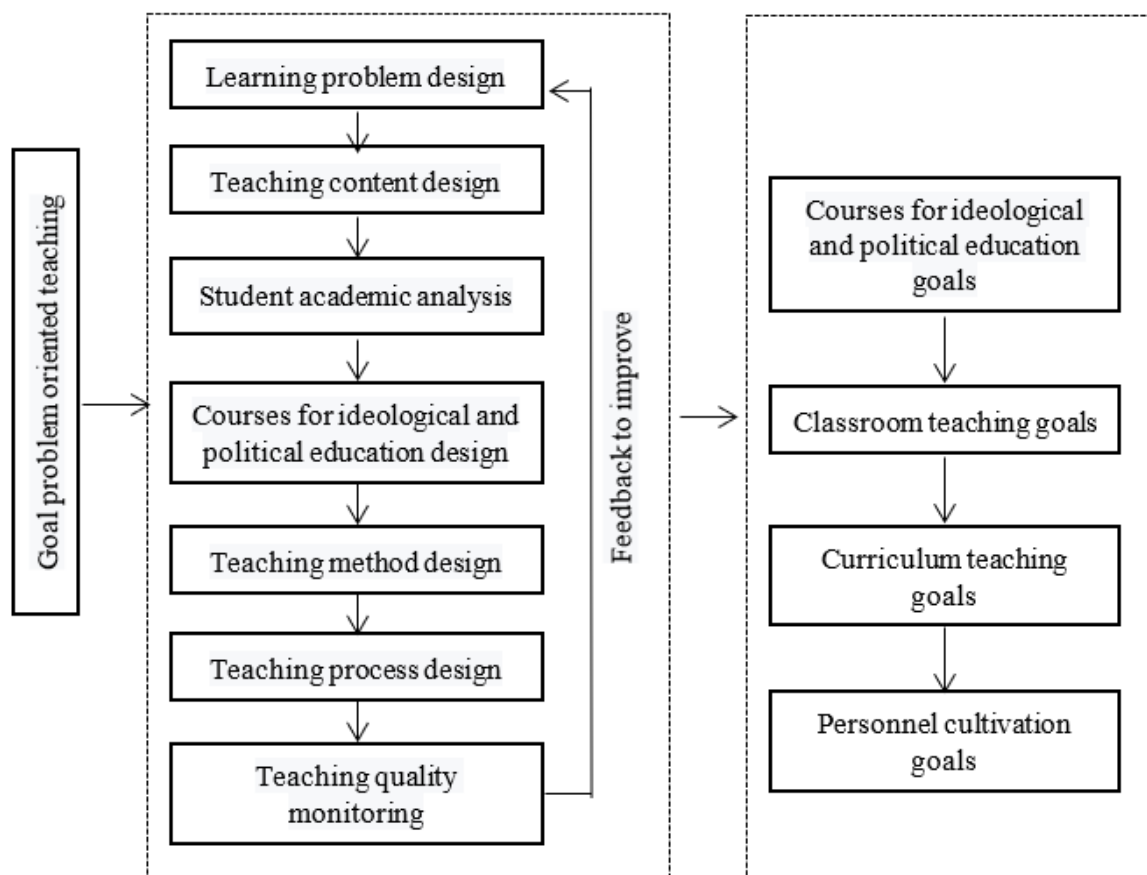


Figure 1. Basic Idea of Goal Problem Oriented Teaching

(1) Course analysis stage. Teachers should develop the curriculum syllabus according to the professional training goals, and they should develop the teaching objectives of the course according to the syllabus. What's more, teachers are supposed to integrate the important and difficult content of the course chapter to develop the chapter teaching goals.

(2) The preparation stage of course materials. Teachers are required to independently make or find online course resources for online teaching according to the course chapter content and they should share offline course resources with students according to the offline teaching content, so as to facilitate students' independent learning.

(3) Teaching stage. It is mainly divided into online teaching and offline teaching. Online teaching is mainly completed through live online teaching, which mainly includes goal problem oriented course content narration, video watching, interactive Q&A and other forms. Offline teaching is mainly completed by students' independent learning, which mainly includes students' pre-class preparation, watching videos, completing homework and thinking about multi-level problems according to teachers' uploaded resources.

3.2.2 Design questions around teaching goals

Question design in goal problem-oriented teaching requires teachers to design multi-level course questions around teaching objectives, which are mainly divided into five levels: basic questions, key q

uestions, difficult questions, application questions and expansion questions.

(1) Basic problems. Based on the basic concepts and definitions of the chapters, the complex questions are simplified, and the answers are given by teachers, in order to stimulate students' interest in learning.

(2) Key issues. Through the simple basic questions and phenomena, teachers can identify the key questions of the course and analyze the development and change rules of the questions. Students can find the answers through reading, deepen students' cognition and understanding of the knowledge points. This can arouse students' deep thinking in the direction of the questions.

(3) Difficult problems. The difficult problems are the deep and difficult ones in the course chapters. The invisible problems are shown to guide students to analyze the causes of the problems through the phenomena, reveal the essential characteristics of the problems, and cultivate students' thinking ability.

(4) Application problems.

The design of application questions should reflect the characteristics of applying what one has learned, put forward practical questions according to the development rules and trends of the industry. And it should cultivate students' ability to combine theory with practice, improve students' professional quality, and meet the needs of professionals in the industry and profession.

(5) Expansion problem. The design of extension questions should realize the coordination of unification and differentiation, cultivate students' ability to draw conclusions from one example to another, let students know what they are and why, and integrate curriculum ideology and politics in this process, meet students' personalized development, and complete the mission of higher education to cultivate morality.

3.2.3 Curriculum ideological and political design

Curriculum ideological and political education is an effective way for higher education to cultivate students' moral values. In the course of professional curriculum teaching, we should take the curriculum as the carrier, fully explore the moral elements in professional knowledge, cultivate ideological and political environment, complete the integration of professional education and ideological and political education, and improve students' political beliefs and values. The curriculum ideological and political construction should focus on the following key issues:

(1) The improvement of teachers' political and ideological consciousness.

Professional teachers should have the systematic understanding and comprehensive application ability of ideological and political education system, and they should master the characteristics, rules and language forms of ideological and political education, and they are supposed to be able to connect and transform the professional curriculum and ideological and political elements organically.

(2) Construction of professional teaching materials based on curriculum ideology and politics.

On the basis of the ideological and political ability of professional teachers, we should deeply explore the development ability of curriculum materials, integrate the curriculum ideological and political education into the curriculum materials, and create the ideological and political education environment.

(3) Teachers should permeate the course ideology and politics into the whole teaching process. The integration of ideological and political elements into the whole process of teaching, such as: in the process of teaching attendance, homework, assessment and other links corresponding to the socialist core values of integrity; the relationship between curriculum and national industry development corresponds to patriotic sentiment; group discussion is fri

endly to experiment. Practical courses correspond to dedication and so on.

(4) Combination of theory and practice. Based on the correlation between professional knowledge and ideological and political knowledge, the abstract problems in ideological and political elements are explained through specific problems in teaching cases, so as to guide students to discover and experience ideological and political elements in courses and life. And it can cultivate socialist core value thinking and practice curriculum learning, outlook on life, world outlook and values.

(5) The combination of explicit education and implicit education. Ideological and political course is the explicit education of college students' ideological and political education, and professional curriculum ideological and political education is its implicit education. On the basis of explicit education, ideological and political problems in professional curriculum should be deeply explored, so as to realize the coordination between explicit education and implicit education and promote the transformation of subject moral education to curriculum ideological and political education.

(6) Scientific evaluation of curriculum ideology and politics. It is necessary to adopt a scientific evaluation mechanism to evaluate the teaching effect, establish a dynamic evaluation system of teaching content and form, and realize the integrated evaluation mechanism of university management from top to bottom and students from bottom to top, so as to ensure the implementation of curriculum thought and administration.

3.2.4 Teaching quality monitoring

A scientific teaching quality monitoring system is the key link to ensure the effective implementation of goal problem oriented teaching mode. The teaching quality monitoring system should include two parts: teaching supervision and student feedback, as shown in Figure 2:

(1) Teaching supervision. It is necessary to set up the teaching supervision team which is composed of the experienced teachers, carry out teaching inspection and attend the lecture at random. The main supervision content includes professional personnel cultivation project, course syllabus, examination syllabus, teaching plan, course text, students' class situation, teaching process and other links.

(2) Students' feedback. It's mainly composed of classroom interaction, teaching evaluation activities and course assessment effect, etc. The classroom interaction mainly includes attendance, classroom enthusiasm, interactive questions and answers, etc. The teaching evaluation activities is the most direct way to reflect the teaching mode effect, also embodies the students' acceptance of teaching mode. Examination mechanism should contain the form of usual performance, curriculum papers and examination, and the like. To characterize the implementation effect of the goal problem oriented teaching mode, examination content should contain fundamental knowledge and applied extended knowledge.

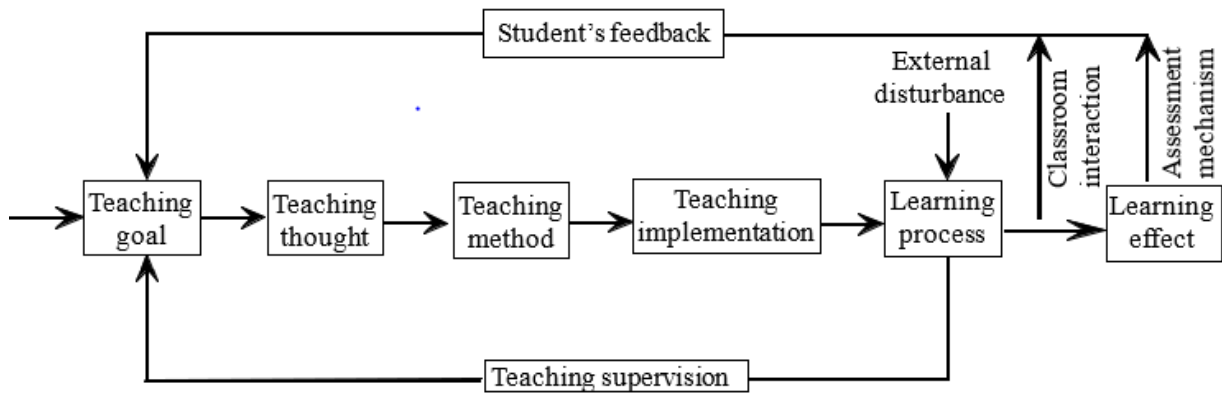


Figure 2. Closed Loop of Teaching Quality Control

4. Application of goal problem design in Fire and Explosion course of Safety Engineering

4.1 Teaching process design

There are three parts about the goal problem oriented teaching: curriculum analysis, preparation of course materials, curriculum teaching, as shown in Figure 3:

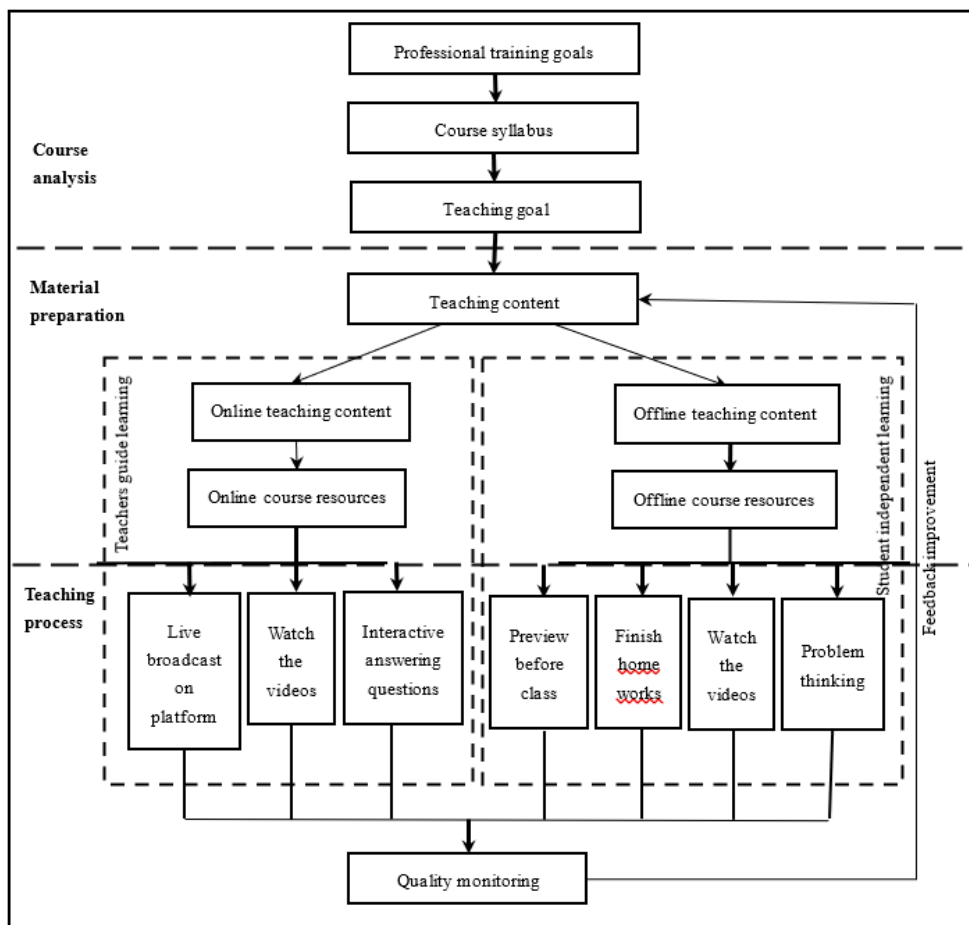


Figure 3. The goal problem oriented teaching

(1) Course analysis stage. Combining the goal of training petroleum chemical process safety with emergency management engineering and technical talents for the major of safety engineering in our school, we are supposed to determine the training program for the course of Fire and Explosion, design its teaching goal: training students to master the theoretical basis about the question of Explosive engineering, which can help them have a certain preventive capacity to analyze and think about the accident cases according to practical situation; in addition, hereby this training target, the syllabus and examination syllabus are formulated.

(2) Preparation stage of course materials. In combination with the course content, the phenomena of fire and explosion in production and life, relevant cases, laws, regulations and standards are sorted out, and a large number of interesting materials are combined. For example, in explaining the various forms, differences and relations of solid combustion, why is The Old Charcoal Seller rather than The Old Wood Seller? In this way, we can combine professionalism with practice, prepare online and offline course resources, deeply design multi-level target problems, and improve teaching plans, lecture notes, videos, cases and other course materials on this basis.

(3) Curriculum teaching stage. Be goal oriented, offline studying will raise questions to inspire students to study independently. For instance, when talking about the content of fire prevention, students

are required to think from multiple perspectives about why the rural residences structure are mainly composed of brick and stone in China but the wooden structure mainly in America? After raise the questions, when it comes to online teaching, it will answer these basic questions from the professional point of view of fire prevention, also combined with the actual from the resources, environment, culture and other aspects of its difficult problems, application problems and expansion problems. The way of narration also flexible, include watching videos, questions and answers, students' reading thinking, subject testing and other forms to accomplish the teaching process. From online to offline, students through studying independently, classroom listening, discussion on extension of problems, greatly expanded the curriculum content, it can be further smoothly to integrate professional knowledge with curriculum ideology. For example, from the changes of Chinese and American dwellings, we can see the changes of Chinese dwellings in recent decades, which shows that the living conditions of the citizens have been greatly improved, so as to cultivate students' patriotic sentiment in a quiet way.

4.2 The goal problem design

The core part of goal problem oriented teaching, the goal problem design should start with the purpose of teaching, design problems in combination with curriculum content, and define the hierarchy of the goal problem, as shown in Figure 4:

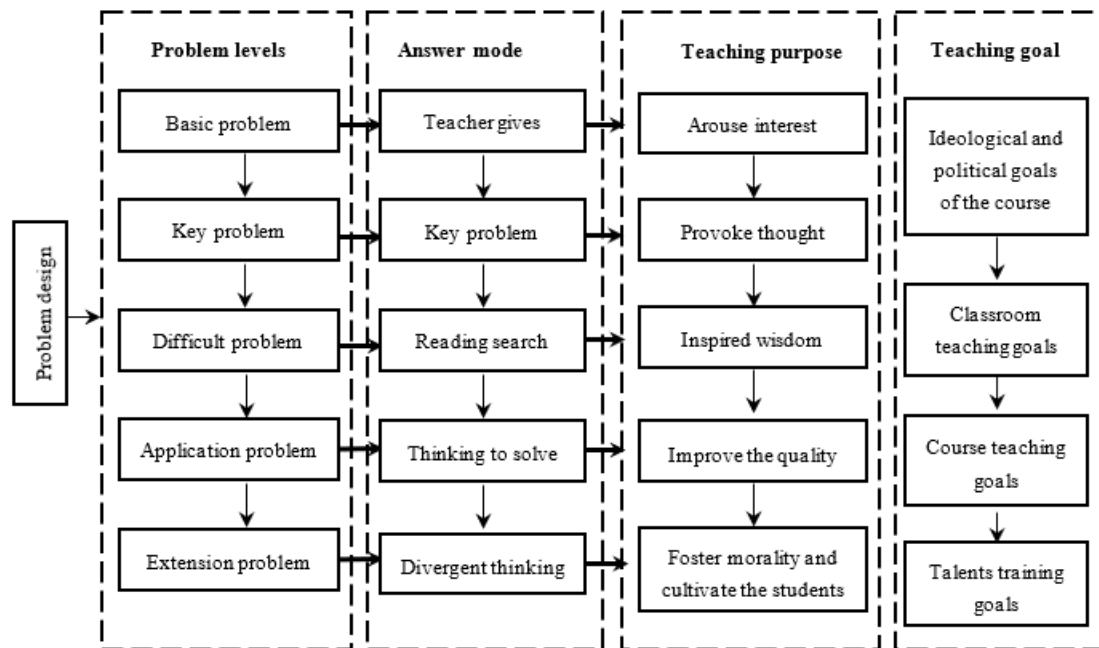


Figure 4. the goal problem design

(1) Basic problem design. It should design the basic question firstly in goal question design of the course of Fire and Explosion, which is the basic concepts related to fire and explosion, such as: What is combustion? What is an explosion? What are the three elements influencing combustion? The answers are given by teachers, and the types and characteristics of combustion are introduced according to various burning phenomena in life, will guide the students' interest and thinking on the key problems.

(2) Key problem design. What are the stages of the combustion process? What are the theory of activation energy, peroxide theory and chain reaction theory of combustion? What are the categories of explosions? What does explosion limit theory mean? Through various combustion phenomena in production and life, the combustion process and various combustion theories are introduced. The answers are to be found by students in reading, teachers to check and fill the gaps, and students can learn independently to deepen their understanding.

(3) Difficult problem design. Heat release and heat dissipation curves during combustion? What are the factors that influence the explosion limit? The problems of heat release and heat dissipation in the combustion process and the factors influencing the explosion limit are the difficult problems in this chapter, and also is the critical period for the combination of theory and practice. From the analysis of the heat release process and the key factors of the explosion limit, students are prompted to think deeply about

the technical means of fire and explosion protection.

(4) Application problem design. Why can firewood haystack produce spontaneous combustion? What is the formation mechanism of sonic boom? What are its hazards and applications? Combine theory with practice, and on this basis, think about fire and explosion prevention, safety layout, emergency handling and other deep problems of safety disciplines, so as to cultivate students' professional quality.

(5) Extension problem design. What is the chain reaction mechanism of fire and explosion caused by leakage and spread of hazardous chemical storage tank? Key problem from the industry guides students' divergent thinking, study of dangerous chemicals leakage diffusion characteristics, fire, explosion, target tank failure mechanism, the deductive process of domino accidents, etc. It can trigger the students' interest in scientific research, and from the aspects of chemical safety and emergency management in the course education, achieve the goal of college to foster morality and cultivate the students.

5. Conclusion

This paper analyzes the problems existing in online teaching during the epidemic, applies the goal-oriented teaching mode to the design of fire and explosion courses, and it draws the following conclusions:

This paper analyzes the changes in education patterns and problems in online teaching during

COVID-19. The change of educational form during the epidemic period was analyzed mainly from the aspects of teacher teaching mode, student learning mode and school management mode. Based on the transformation of educational form, this paper analyzes the problems of online teaching, such as lecturing, simple interaction, difficult supervision and network status, which seriously affect the teaching effect.

This paper designs target-oriented teaching. This paper studies the goal-oriented teaching to meet the requirements of the four levels of curriculum ideology, classroom teaching, curriculum teaching and talent training, and it analyzes the four principles of teaching design: target, system, synthesis and personality. And from the teaching process design, the goal question design, the curriculum ideological and political design and the teaching quality control and so on four aspects deeply discusses the goal question oriented teaching connotation.

This paper proposes an objective design of fire and explosion course for safety engineering. From the course analysis, teaching preparation and teaching process, we use these three stages to carry out the fire and explosion course teaching of safety engineering specialty, design basic questions, key questions, difficult questions, application questions and expansion questions, and we give the solution mode and teaching purpose, in order to correspond to the four levels of training goals in personnel training.

Acknowledgments

This study was supported by New Engineering Research and Practice project of The Ministry of Education "Exploration and Practice of Construction of Petrochemical Safety Emergency Response Innovation Talent Training Platform Based on Multi-Party Collaboration"(E-AQGABQ20202715), Guangdong Higher Education Teaching Reform Project "Exploration of the Deep Integration Path of New Engineering Personnel Training for Safety Emergency in Petrochemical Featured Universities"(JY202001), Teaching Quality and Teaching Reform Engineering Project of GDUPT "College of Petrochemical and Emergency Management Industry"(232353), Quality Engineering Project of GDUPT "GDUPT Safety Engineering School-Enterprise Collaborative Education Experimental Area"(214312), the Philosophy and Social Science Research in Colleges and Universities in Guangdong Province of China

(2019GXJK102), and Educational and Teaching Reform Projects of Guangdong University of Petrochemical Technology (JY2019413 & JY201842).

References

- Barrows. H. S. (1996). Problem-Based Learning in Medicine and Beyond: A brief Overview In L. Wilkerson & H. Gilselaers(eds.), Bringing problem-based learning to higher education. Theory and practice(pp.3-12). San Francisco, CA: Jossey-Bass Inc.
- Copiello S., Grillenzoni C.(2020). The spread of 2019-nCoV in China was primarily driven by population density. Comment on "Association between short-term exposure to air pollution and COVID-19 infection: Evidence from China" by Zhu et al. Science of The Total Environment, 744, 141028.
- Dewey, J. (1938). Experience and Education(pp.25-31). A Touchstone Book, Kappa Delta Pi, New York.
- Guo, Y. J. (2020). Online Teaching in the Epidemic Prevention and Control Period: Problems, Countermeasures and Reflection. Contemporary Foreign Languages Studies, 1, 9-13+25.
- He, X., Huang, S. Z., Li, T., Chen, K. K. (2017). A Study of Interactive Style on Students Loyalty in Science Technology Education: Moderating of Management Level, Eurasia Journal of Mathematics, Science & Technology Education, 13(8), 4689-4700.
- Hemmati, F., Saedi, S., Hemmati-Dinarvand, M., et al (2020). Mysterious Virus: A Review on Behavior and Treatment Approaches of the Novel Coronavirus, 2019-nCoV. Archives of Medical Research, 5, 375-383.
- Hong, C. L. (1998). On the Training Effect of Project Studying Method. Management & Efficiency, 11, 42.
- Hu, W. Z. (1982). A Preliminary Study on Communicative Teaching Approach. Journal of Foreign Languages, 10,15-22.
- Hu, X. P., Xie, Z. X. (2020). An Analysis of the Advantages and Challenges of online teaching in universities under the epidemic situation. China Higher Education Research, 4, 18-22+58.
- Keegan, A. and Turner, J.R. (2001). Quantity versus quality in project-based learning practices. Management Learning, 1, 77-98.

- Li, D. G. (1979). A Preliminary Study on Heuristic Teaching Method. *Journal of Xiangtan University*, 7, 132-137.
- Li, K. H., Liu, Y., Xie, H. X., Wang, L., Zhang, L.L., & Luo, E. (2020). Discussion On Online Teaching Mode under the COVID-19 Epidemic. *China Medical Education Technology*, 3, 264-266.
- Liu, G. X. (2020). An attempt to Integrate Grammar Translation Method, Communicative Language Teaching, Task-based Language Teaching: Rationale and Evaluation, 8, 99-104.
- Liu, Y. P. (1989). A Brief Discussion on the Application of the Inquiry-Based Teaching Method in the Teaching of "Chinese Diagnosis". *Journal of Guangxi University of Chinese Medicine*, 7, 49-51.
- Ma, X. F., Ma, Y. L., Tian et al. (2020). Practice and Thinking of "Full Online" Remote Hybrid Teaching under Novel Coronavirus Pneumonia Epidemic. *University Chemistry*, 5, 29-32.
- Phoon, L., Chen, H. (2020). Recommendations on diagnosis and treatment in hepatobiliary surgery under 2019-nCoV epidemic. *Clinics and Research in Hepatology and Gastroenterology*, 4, 403-406.
- Shi, K. W. (1984). A Brief Discussion on Case Teaching Method. *Journal of Shanghai Institute of Foreign Trade*, 1, 22-25.
- Wang, X. B. (2020). Online Teaching of "Water Supply and Drainage Engineering" under Epidemic Situation. *Guangdong Chemical Industry*, 47(06), 251-252.
- We, R. G. (2020). Improve the effectiveness of online science teaching in primary schools in the process of reform. *Digital Teaching in Primary and Secondary Schools*, 5, 21-24.
- Wu, D. G. (2020). The Retrospect and Reflection of Educational Technology Evolution: Online Teaching in Universities under the Epidemic Situation. *China Higher Education Research*, 4, 1-6+11.
- Yuan, Y. F., Lin, L., Wang J., et al. (2020). Preliminary Exploration of Online Teaching during Epidemic Prevention and Control. *University Chemistry*, 5, 269-272.
- Zhang, L., Liu J., Sun B., et al (2020). Exploration and Reflection on Physiology Online Teaching Mode under the Novel Coronavirus (2019-nCoV) Epidemic. *Medical Education Research and Practice*, 2, 221-224.