

Original research article

# On the status quo and improvement ways of civil engineering teaching in China's colleges and universities

Wei He

Zhixin Co., Ltd., Suihua 152000, Heilongjiang, China; liuwei@163.com

Abstract: With the gradual increase of civil engineering projects in our country, the demand for civil engineering talents from all walks of life is increasing, which effectively promotes the reasonable development and implementation of civil engineering talent training. Regarding this issue, under the promotion of educational reforms, Chinese educators have conducted in-depth analysis and investigations on the current development status of civil engineering teaching in colleges and universities, aiming to further realize the training and construction of civil engineering talents in colleges and universities, so as to help our country The reasonable satisfaction of civil engineering construction needs lays a solid foundation. This article discusses the current teaching situation of civil engineering in universities in my country, and proposes corresponding optimization suggestions, aiming to further improve the teaching quality of civil engineering in universities, so as to effectively meet the urgent demand for advanced talents in the civil engineering industry.

Keywords: college education; civil engineering specialty; teaching status; main problems; optimization methods

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In recent years, under the promotion of education reform, a large number of universities have conducted in-depth analysis and exploration of traditional teaching models, aiming to effectively realize the adjustment and transformation of education and teaching models, so as to lay a solid foundation and guarantee for the reasonable training and construction of our talent team. On this issue, through the analysis of a large number of teaching practice, educators said that at this stage, there are still some shortcomings in the development of civil engineering teaching in my country's colleges and universities that need to be improved. Based on this, educators combine teaching Work practice analyzes the current situation of civil engineering education and teaching in colleges and universities.

#### 1. The importance of civil engineering teaching in colleges and universities

In General, as one of the important components of the teaching work of colleges and universities, the development and implementation of the teaching work of civil engineering has an important role and value for the training of civil engineering talents in my country. On this issue, educators pointed out that through the development of civil engineering teaching in colleges and universities, educators can help students further realize a full understanding and reasonable mastery of professional knowledge of civil engineering, which has a good guiding role for the cultivation and construction of civil engineering talent team in China<sup>[1,2]</sup>. On the other hand, through the reasonable development of relevant teaching work, teachers can help students to effectively realize a full understanding of civil engineering, which plays a positive guiding role in the formation of students' good concept of employment, and is crucial to the reasonable construction

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of civil engineering talent team in China.

## 2. Development status of civil engineering teaching in colleges and universities

## 2.1. Traditional educational concepts have a greater impact, and there are relatively few opportunities for interaction between teachers and students

A large number of studies have shown that at this stage, due to the relatively large influence of traditional education concepts in the teaching process of civil engineering in colleges and universities, some teachers have not effectively realized the full understanding and reasonable attention to the value of students' economic teaching while carrying out teaching work. Based on this, in the teaching process, it is often difficult for teachers to reasonably realize the effective design and implementation of the teacher-student communication link, which is not conducive to the orderly development of teacher-student communication in the classroom teaching process, and has an impact on the good teacher-student interaction. Furthermore, it is not conducive to the reasonable cultivation of students' thinking vitality, and it hinders the cultivation and construction of students' civil engineering thinking<sup>[3]</sup>. On the other hand, based on traditional educational concepts, it is often difficult for student groups to reasonably achieve effective communication with teachers, which is not conducive to the timely resolution of potential problems of students, and has adversely affected and hindered the cultivation of students' core literacy in civil engineering. It limits the effective development and reasonable construction of our civil engineering talent team.

## 2.2. The classroom teaching mode is relatively single, which is not conducive to the creation of a good teaching atmosphere

From the perspective of teaching work, at this stage, the classroom teaching model used in my country is relatively simple, mainly based on traditional development teaching. Based on this, students often find it difficult to realize the knowledge of civil engineering in the process of teaching work. The full understanding of this has caused adverse effects and obstacles to the improvement of students' civil engineering ability. On the other hand, a large amount of data shows that based on the traditional teaching model, it is often difficult for students to reasonably participate in the teaching process, which in turn makes it difficult for them to cultivate and mobilize interest in knowledge learning during the learning process, which is not conducive to a good classroom teaching atmosphere<sup>[4,5]</sup>. Construction has caused a negative impact and obstacles to the improvement of classroom teaching efficiency.

#### 2.3. The lack of teaching evaluation system restricts the reasonable adjustment of teaching methods

At present, in the teaching process of civil engineering in colleges and universities, some teachers have not effectively realized the reasonable attention to the teaching evaluation work while carrying out the teaching work. Based on this, it is often difficult for teachers to fully analyze and rationalize the teaching effect. Evaluation, in turn, is not conducive for teachers to adjust and transform teaching methods based on students' conditions, and has a negative impact on the quality of teaching work. At the same time, a large amount of data shows that due to the lack of teaching evaluation, it is difficult for college teachers to achieve a comprehensive understanding of the cultivation of students' core literacy in civil engineering during the teaching process, which has an adverse effect on the adjustment of subsequent teaching work. In this regard, the researchers pointed out that the lack of a teaching evaluation system has made it difficult to achieve targeted guarantees during the transformation of the teaching work of civil engineering in colleges and universities, and has restricted the cultivation of the comprehensive quality of civil engineering teaching in

colleges and universities.

# 3. Suggestions for improving the teaching quality of civil engineering in colleges and universities

## 3.1. Do a good job in introducing advanced educational concepts to effectively realize the value of student groups

For college teachers, in order to further improve and optimize the teaching quality of civil engineering majors, teachers should actively make reasonable changes to their own educational concepts during the teaching process, so as to effectively promote the timely adjustment and improvement of teaching methods and give full play to the student population The value in educational work provides a new impetus for the cultivation of students' civil engineering thinking. On this issue, a large number of teaching practices have shown that through the innovation of educational concepts, students can better communicate with teachers in the teaching process, which has a positive significance for the cultivation and mobilization of students' thinking activity<sup>[6]</sup>. For example, in the process of explaining the construction technology of civil engineering, through the development and implementation of questions, teachers can use relevant questions as an entry point to guide students to think rationally. In this process, by combining actual problems, students can focus on relevant civil engineering. Reasonable thinking in engineering technology has a good guiding effect on the expansion of students' thinking ability.

#### 3.2. Introduce advanced classroom teaching technology to promote students' interest in knowledge learning

From the perspective of development, in the process of civil engineering education and teaching in colleges and universities, in order to achieve reasonable improvement and optimization of teaching quality, teachers should actively apply advanced teaching techniques to help students better realize their knowledge of civil engineering Effective understanding and mastery. In response to this problem, educators pointed out that in the classroom teaching process, through the application of multimedia equipment, teachers can demonstrate abstract civil engineering techniques to help students further understand the effects of different techniques in the application process. It has a good promotion significance for the cultivation of students' core literacy in civil engineering. For example, in the teaching of civil engineering construction technology, through the application of multimedia teaching, teachers can guide students to conduct a more intuitive comparative analysis of the advantages and disadvantages of different types of technologies in the application process, and improve the level of students' civil engineering knowledge. Has positive value.

## 3.3. Improve the evaluation standards of teaching work to ensure the scientific improvement of teaching methods and key points

In the civil engineering teaching work of colleges and universities, in order to achieve a reasonable guarantee of teaching efficiency, teachers should reasonably do a systematic analysis and exploration of relevant teaching content while carrying out teaching work, so as to actively adjust teaching methods according to the actual situation of students And improvement, in order to ensure that the teaching method can meet the relevant needs of students for the learning of civil engineering knowledge, and provide corresponding help for the optimization of classroom teaching efficiency and the improvement of students' knowledge and understanding. For example, in the process of teaching knowledge of engineering hydrology, engineering drawing, and geotechnical mechanics, through the reasonable setting of teaching evaluation links, teachers can analyze their knowledge mastery based on students' performance, so that they can conduct analysis based on their knowledge mastery<sup>[7]</sup>. The adjustment and transformation of the teaching

plan will lay a solid foundation for the cultivation of students' knowledge and understanding.

#### 4. Conclusion

In general, with the improvement and optimization of China's economic development level, the number of civil engineering projects has gradually increased. Based on this, the demand for advanced talents in civil engineering from all walks of life has shown a sharp rise. In order to effectively deal with this problem, in recent years, under the leadership of education reform, a large number of colleges and universities have conducted in-depth analysis on civil engineering majors, aiming to further realize the adjustment and transformation of the training mode of China's civil engineering professional talent training mode, so as to further meet the needs of civil engineering professionals from all walks of life. In this process, by analyzing the teaching work of civil engineering in colleges and universities, the researchers pointed out that at this stage, due to the influence of various factors, the teaching level of civil engineering in colleges and universities is relatively weak. Based on this, teachers are carrying out teaching work. At the same time, we should reasonably do a good job in learning advanced educational concepts, so as to effectively realize the full display of the educational value of the student group, help students better participate in the classroom teaching process, so as to guide them to achieve a full understanding and reasonable grasp of civil engineering knowledge and provide assistance for the cultivation of students' core literacy in civil engineering.

#### **Conflict of interest**

The author declares no conflict of interest.

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