Research and Discussion on Cultivation of Creative Humanistic Quality in Biochemistry Teaching

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Fund project: Construction Project of Core Curriculum Group of Qilu University of Technology (40012712)

Abstract: Fundamentally speaking, medicine is not only a complicated systematic science, it is also a dual-attribute science with natural science and humanistic sociality. Therefore, an excellent medical talent needs not only solid professional basic knowledge but also excellent humanistic qualities. The biochemistry course is a more important basic course in the medical professional education, and the integration of innovative humanities education in biochemistry teaching has a very important guiding role for the students’ subsequent learning. Starting from the teaching practice, this article expounds several ways to implement humane quality training in biochemistry teaching.

Keywords: Biochemistry; Humanities; Quality education

Biochemistry is a very important basic course in the medical specialty course. It is both a basic discipline in life science and a cutting-edge discipline with the most rapid development and the most dynamic content in the natural sciences. Biochemistry is the earliest professional basic course that medicine majors come into contact with when they enter the school. It is an important foundation for learning medicine well. If they can learn well, it will build a good confidence for students to further study medicine knowledge in the future. In order to further help students understand medical professional issues and further strengthen students’ humanities education in medical education, adding humanities education in biochemistry teaching is a very important and effective method. Combining years of experience in biochemistry teaching, the author has discussed in detail the effective methods of humanistic quality cultivation in biochemistry teaching based on practical teaching issues, and provided some useful suggestions for improving the quality of biochemistry teaching.

1. Humanities education for medical students

1.1 Connotation of humanities in medicine

For medical students, their humanities should include solid medical knowledge and the humanistic spirit that they need to master in medical work. More specifically, they should gradually learn medical knowledge and combine humanistic education Integrate and accumulate good ideological insights, behavioral self-cultivation and corresponding moral character.

In view of the current medical situation in China, the relationship between doctors and patients is relatively tense. Medical workers should not only solve the patient’s pain, but also pay attention to the patient’s mental health, carry out good humanistic care for the patient, and satisfy the patient’s basic demands to the greatest extent. The humanistic literacy of medical students mainly includes noble medical ethics, strong physique, good teamwork ability and solid professional skills. The most important thing is to have an open-minded learning attitude and continue to make up for their deficiencies.

1.2 The goal of humanities education in medicine
The goals of humanities education in medicine major are as follows: first, to uphold the concept of "benevolence", that is, to train students to implement the value concept of "benevolence" in their studies and future work; second, they should pay attention to "people-oriented" work learning attitude, cultivate the humanitarian spirit of students in the future work; the last is the complexity of education and teaching. The medical students will not face rigid data and cases in the future, but natural people with complex social nature, so students should learn to be flexible work around. Schools and teachers should combine these characteristics and integrate humanistic literacy education into biochemistry teaching. In addition to teaching students to master solid basic theoretical knowledge, students should also be trained to have good professional ethics and more complete ideological quality.

2. Cultivating the creative ability of medical students

2.1 The connotation of innovation ability in medicine

Today, the development of medicine is very fast. Whether it is theoretical basis or actual medical technology, it is constantly communicating with other natural disciplines, which makes contemporary medicine show a highly integrated and innovative comprehensive Development trend. Therefore, in the learning process, medical students should not only be proficient in the knowledge theory of the major, but also strengthen their cultivation of innovative ability, constantly learn more new knowledge, learn to analyze the medical theory from different angles, and form good Innovative thinking ability.

2.2 The goal of cultivating innovative ability of medical students

With the continuous strengthening of medical reform, the cultivation goals of medical students' innovative ability can be mainly divided into the following points: First, establish a positive learning environment and cultivate students' innovative thinking and innovative ability. The second is to continuously cultivate more professional talents with innovative spirit, while ensuring students' basic medical knowledge, and constantly strengthening students' innovative practical ability to enhance students' ability to adapt to complex environments. The third is to encourage students to combine innovation ability with traditional good moral culture, improve students' comprehensive professional quality, and cultivate a batch of truly high-level and highly-qualified medical talents.

3. Several ways to implement humane quality training in biochemistry teaching

3.1 Strengthen the role of teachers as role models and improve teachers' humanities

Teacher moral culture and teacher moral education is a very important way of humane quality education. Schools should pay attention to the influence of teachers' qualities in education and teaching, and establish a good teaching role model. Only by setting an example by teachers and constantly maintaining the improvement and progress of their humanities can teachers really improve the quality of humanities and cultivate the quality and efficiency of teaching. Therefore, based on this teaching concept, schools should actively carry out various educational activities that promote the improvement of teachers' humanistic qualities. For example, schools can carry out a series of educational activities that focus on typical navigation and cultivate teachers' ethics, and establish good teacher cultural literacy Cultivate the environment, comprehensively improve the use of teachers' role models, and lay a good foundation for the cultivation of students' good humanities.

3.2 Implement teaching method reforms to stimulate students' interest in learning

Biochemistry is a basic course in medicine. Due to the need to master and memorize the basic knowledge or many, traditional boring teaching methods can not effectively enhance students' interest in learning, which reduces the efficiency of students in biochemistry. Therefore, teachers should fully carry out relevant teaching and research activities, constantly try various new teaching methods, listen to students' opinions, choose more suitable teaching strategies, and improve the teaching strategies of biochemistry.

In the teaching practice of biochemistry, teachers should fully reflect the main position of students, and adopt innovative and interactive teaching methods to improve the effectiveness of biochemistry teaching. In addition, teachers can also use multimedia teaching equipment and other online education resources to broaden the content of
biochemistry classroom teaching and improve students’ enthusiasm for learning. The comprehensive use of a variety of innovative teaching methods can not only enhance students’ interest in learning, avoid the disconnection of basic theoretical knowledge and actual clinical operations, but also effectively enhance students’ teamwork spirit, improve students’ innovative ability, and greatly improve the students’ humanities help.

### 3.3 Incorporate and infiltrate humanistic quality training in theoretical research

Biochemistry is known for its many basic knowledge and miscellaneous. At the beginning, students are somewhat afraid of the complicated theoretical knowledge, and because the teaching content of the course is boring, teachers can easily lead to students if they follow the traditional “one word classroom” teaching Tired of learning emotion, which directly affects the teaching quality and teaching effect of biochemistry. Teachers can properly infiltrate some humanities knowledge related to biochemistry in the teaching, which can not only make the classroom rigid content more interesting, but also effectively improve students’ learning attention. For example, when explaining the content of biochemical substance metabolism, teachers should first explain to students the history of research and development related to substance metabolism, introduce the interesting and scientific research spirit of scientists related to substance metabolism research, and use true stories to teach students only Constantly work hard and work hard to achieve academic success.

### 3.4 Establish a good laboratory culture atmosphere

Biochemistry is a subject with high experimental requirements. In order to further promote students to understand and master the corresponding theoretical knowledge, basic experimental teaching is very necessary, so it is particularly important to establish a good laboratory culture. Through experimental teaching, teachers should cultivate students’ good hands-on ability and observation ability, effectively improve the teamwork spirit of students in the mutual cooperation of students, and have a very important guiding role in cultivating students' rigorous scholarship and excellence in learning attitudes.

The cultural atmosphere of the laboratory is inseparable from a good laboratory basic environment. The school should increase the investment in medical laboratories in terms of the characteristics of biochemistry and medicine, to ensure that the experimental teaching can be conducted in a good and orderly manner, and should be in the laboratory. At the beginning of the establishment, a good, formal and effective laboratory management system was established. Strict rules and regulations were used to restrict the behaviors of teachers and students. In order to enable students to establish good habits that regulate personal behaviors during long-term study, it is extremely The improvement of students’ humanistic literacy has a very positive effect on students' entry into work positions in the future.

### 3.5 Use information technology to further enhance students’ humanistic spirit

The advent of the Internet era has rejuvenated various industries, and has greatly enhanced the influence of the industry. Medical education is also one of them. The integration of information network technology and medical education can effectively promote the reform of teaching methods, and has a great advantage in penetrating the cultivation of humanistic qualities and student moral education. For example, teachers can use the convenient online education platform to push some photos and articles related to biochemistry to improve students' human literacy, so as to promote the cultivation of students' human qualities in a subtle way. In addition, teachers can also use the online communication platform to invite some experienced medical workers to communicate with students online, answer students' puzzles in learning, let students feel the future working environment and methods in advance, and improve students' ability to communicate with others. At the same time, students' enthusiasm for learning is effectively improved, and the teaching quality of biochemistry is improved from the side.

### 3.6 Improve teaching evaluation system and stimulate students’ humanistic spirit

Teachers should continually improve the teaching evaluation system, adopt a more mature and orderly assessment method, combine segmented examinations with multi-stop examinations, and strive to enhance the communication and feedback between students and teachers so that students are not learning to cope with examinations To guide students to understand their own deficiencies through assessment, find problems and solve problems in the assessment in a timely manner, improve students’ hands-on ability and communication ability, which has a very great role in stimulating and
improving students’ humanities.

4. Conclusion

In summary, humanistic literacy is indispensable in medical professional education. Biochemistry is the most important basic subject in the early stage of medicine. The integration and penetration of humanistic quality training in the teaching process can play a positive role in stimulating students’ interest in learning, standardizing students’ behavior habits, and improving the quality of teacher teaching management. Teachers should actively carry out experimental teaching activities to strengthen the cultivation of humanistic qualities in practical teaching, pay attention to the growth of students’ spirit, and cultivate more high-quality medical talents with both ethics and talents for the country and society.

References