



## TEACHING RESEARCH

# Experience of Teaching International Students Anatomy

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## Abstract

In recent years, the education of foreign students in China has entered a rapid development stage. The differences in the educational and cultural backgrounds of foreign students, the obstacles of language communication between teachers and students, and the lack of unified textbooks in China have affected the teaching outcomes of anatomy classes among foreign students. In teaching practice, we try to adopt flexible teaching modes as seminar-type theoretical teaching, tutorial-type experimental teaching and role-playing, so as to make anatomy classes interactive, and adapt to the thinking characteristics and learning needs of foreign students. We adopt the evaluation system combining formative evaluation with summative evaluation, which greatly improves students' learning enthusiasm and teaching effect.

## Keywords

International students; Anatomy; Teaching mode; Formative evaluation; Summative evaluation

With the rapid development of China's economy, the number of foreign students in China has increased year by year, and the education of foreign students in

China has entered a stage of rapid development [1]. Since 2003, our school has enrolled foreign students majoring in clinical medicine. Now the number of foreign students in our school has reached several hundred. With the continuous improvement of international medical personnel training standards, higher requirements have been put forward for the quality of medical education and teaching for foreign students in China [2]. Anatomy is a basic medical subject that medical students first come into contact with when they enter the field of medicine.

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This course contains a large number of professional vocabularies. Foreign students are, all the time, taught in English and this brings unprecedented challenges to their teachers. As a subject secretary in our University, the author is responsible for the management of the teaching of the subject and takes part in teaching international students in our teaching and research department as well. Below is a summary of some experiences gathered from teaching of international students anatomy.

## **1. Problems encountered in teaching international students anatomy**

### *1.1 Language barriers*

Our students are mainly from Southeast Asia, Africa and the Americas. The English pronunciation of students from Africa and America is clear and accurate, whereas students from India, Nepal and other East Asian countries speak fast and have strong local accents. Teachers often find it difficult understanding their expressions, which poses great obstacle to communication between the teachers and these students. When it comes to the level of English Language proficiency, domestic teachers may be relatively strong in reading and writing, but most are relatively weak in oral expression and listening. In addition, anatomy itself has a large number of vocabularies and its root is more complex. Some professional vocabularies originate from Latin, so it is difficult to accurately pronounce them. Because of the inability of teachers to express themselves in English Language with ease, they resort to reading the contents of textbooks or lecture notes. They avoid positive communication with students as much as possible, and dare not expand the contents of the classroom. When teachers talk about some important structures, they would like to teach in connection with clinical diseases, but often they are not able to express themselves. Because of the language barrier, the

quality and effect of teaching is subtly weakened.

### *1.2 Differences in the cultural background of students' education result in "not getting used to" and "not adapting to"*

The teaching ideas and cognitive training of foreign students are quite different from those of Chinese students. From my own teaching experience, I deeply realize that foreign students are actively thinking in class, have strong independent thinking ability, love to ask questions at any time, dare to express themselves, and like open teaching methods. If there are any questions in class, they will ask the teacher directly on the spot. If the teacher avoids the students' problems and continues to lecture, they will talk in private. Then the rhythm of the teacher's teaching is interrupted and the whole classroom becomes chaotic. If teachers suspend lectures and solve problems by impromptu communication, the whole classroom atmosphere will become more active, and then the classroom order will be better. It can be seen that the traditional "cramming" teaching mode is not suitable for foreign students in China.

### *1.3 There is no fixed textbook, which is also a difficult problem in the education of foreign students*

When I first taught foreign students Systematic Anatomy, I came to the classroom 15 minutes earlier and communicated with my students. I found that most of the students were taking a blank notebook to class without lecture notes or textbooks. This may be related to the educational methods and modes of their countries of origin. Textbooks are the most basic learning materials for students. Without them, the quality of teaching and learning would be affected.

## **2. Practical teaching practices and reflections to salvage the situation**

### *2.1 Strengthening teacher training*

Starting from 2015, with the strong support of the International Cooperation and Exchange Department

of our university, our teaching and research department selected 3-4 teachers every year to attend the provincial intensive training courses for foreign students' English teachers. In 2016, 2 young teachers were selected to attend the training courses for foreign students' English teachers from the Ministry of Education. In addition, through the platform of English salon and English corner, teachers can strengthen communication with foreign students, adapt to the characteristics of intonation and pronunciation of foreign flavor English in regular communication, and clear up language barriers for better interaction with students in class.

## *2.2 Changing the traditional teaching model: Three links in the teaching process of anatomy*

2.2.1 Pre-class preparation stage: According to the requirements of teaching documents such as training plan, curriculum standards and syllabus for foreign students, under the leadership of the director of the research department, the teachers prepare the lectures collectively, and the teachers produce the English version of PowerPoint to form the English version of the lecture manuscript. The teaching and research department has formulated the English version of "Systematic Anatomy" and "Local Anatomy" experimental guidance and experimental report book. Before each lecture, teachers share English versions of PowerPoint, learning videos, web sites to student them via WeChat. This can make up for the deficiencies caused by the lack of textbooks.

2.2.2 Adoption of flexible teaching methods: In anatomy class, we should adopt flexible teaching methods to make anatomy interactive, which accords with the thinking characteristics of overseas students in China. The author has tried several forms of teaching, but also gets new inspiration from constant attempts. It can be said that changing the classroom teaching mode for foreign students will make teaching and learn no longer too stuffy to express themselves,

and students are no longer the "naughty bag" that often interrupt teachers.

A. Seminar-style theory teaching: This kind of teaching method involves summary and review at the end of a chapter or unit. For example, one week to the the end of the local anatomy of the lower extremity lectures, the teacher presents to the students selected topics on anatomy of the lower extremities and its clinical correlates such as the etiology of sciatica, attention to surgical treatment of varicose great saphenous vein among others. The teacher then divides the students into four groups to discuss and prepare PowerPoint. In the next class, a representative from each group would present it before the entire class. It should not only be a review of the contents of the selected, but should as well entail explanations of some clinical problems by using anatomical knowledge, which would greatly stimulate students' enthusiasm and initiative in learning. It would at the same time harness the application of the talents of the students in medicine. Although the teacher's listening and speaking ability is relatively weak, he/she is the able to read the PowerPoint presentations developed by the students. This form of guidance subtly enhances the self-confidence of teachers.

B. Tutorial-experimental teaching + role playing [4]. Anatomical experiment is the most important part of mastering anatomical knowledge. Compared to domestic students, foreign students tend to be bolder and are more willing to operate, but their norms are poor, and their sense of solidarity and cooperation is not enough. In order to guide them perform autopsy and study specimen better, the first step is to cultivate students' spirit of division of labor and cooperation. Before the beginning of the experiment, the students are divided into four groups. Each group of students chooses a group leader, and then carries out a clear division of roles, such as the operator, assistant, technical guide and consultant. Students take turns to

play various roles. Secondly, make clear the “task” of each experiment lesson, and let the students “take the task” in targeted anatomical operation. Teachers offer guidance, standardize the operation of students, and eventually the group as a single unit is evaluated, and the evaluation forms part of the semester's grade. This kind of experiment class is carried out in groups, which improves students' enthusiasm for learning and strengthens their sense of unity and cooperation.

2.2.3 After-class stage: after the theoretical lesson, we can further consolidate our knowledge by arranging homework, such as Systematic Anatomy. After the end of the “Sports System”, the instructor would print out the key content of the system for the students in the form of test questions, so that each student completes and hand it in independently. After the teacher's approval, the results would contribute to the semester's grade. For example, “Local Anatomy” is mainly an experiment course. After the operation of upper limb content is completed, students write experimental reports in groups and draw important anatomical structures. At the end of each semester, a unified report on anatomical experiments prepared by the teaching and research department should be completed.

### 2.3 Assessment and evaluation system

Effective development of teaching reform must have a corresponding reform of assessment and evaluation system. With the development of diversified teaching methods, the assessment and evaluation system combining formative evaluation with summative evaluation has been adopted accordingly. In teaching practice, for the assessment of foreign students, we adopt a combination of the semester score (40%) and the final theoretical test score (60%). Among them, 20% of the semester score mainly refer to the students' performance in the formative evaluation process, such as the enthusiasm and accuracy of students' answering questions in class, the participation of students, the

standardization of experimental operation in group collaboration, and the mutual evaluation of students in class. In addition, the quality of experimental reports and homework completion accounts for another 20% of the semester score. Through the reform of this assessment system, students' enthusiasm, participation and learning in the classroom are promoted, and teaching outcomes have also greatly improved.

In a nutshell, with the increasing international influence of our country, the medical training standard for foreign students in China is getting higher with each passing day, and the teaching of foreign students anatomy is as well facing unprecedented challenges [5]. As front-line teachers, we need to think about developing new methods of teaching, employ reforms from multiple perspectives and levels, so as to contribute our wisdom and strength to the improvement of the medical education of our foreign students.

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