

Contributing factors of classroom teaching quality and improving strategies in Chinese universities: From Students' Perspective

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Abstract. The teaching quality of universities directly affects the quality of national talent training. The Academic Affairs Office of Chinese universities, through the establishment of the relevant classroom teaching evaluation index system, plays a supervisory role on the classroom teaching quality. Based on the index system, students evaluate classroom teaching quality before selecting a course online at the end of each semester. The paper reports the findings of a small-scale survey carried out in the X University of China within the framework of the ERASMUS+ENTEP project. Through the questionnaires and interviews given to the students of X University, the objective of the study was to identify the index that teachers need to strengthen and then try to put forward some improvement strategies. The results from the survey highlight the factors that contribute to the high quality of undergraduate classroom teaching from students' perspective, including the unvalued personal moral cultivation of teachers, more attention to the indoctrination of knowledge and ignore the inspiration of mind and the effective interaction between teachers and students. The evidence from this survey suggests that in order to improve the undergraduate classroom teaching quality, teachers should shift the concept of teaching and learning, from the indoctrination of knowledge to the mobilization of students' enthusiasm, inspire them to think, associate and innovate, and guide the individual student to become an integrated well-developed person.

1 Introduction

The undergraduate classroom teaching plays the main role in the talent training. Since 2001, The Department of Education Administration of China has issued several documents on improving the quality of teaching, especially to implement the “National Medium and Long-Term Education Reform and Development Plan (2010-2020)”; in 2012, the Ministry of Education of China issued the “Opinions on Improving Comprehensively the Quality of Higher Education”. According to them, the undergraduate teaching must be considered as the most basic, the most fundamental work of colleges and universities, because the classroom teaching plays the main role in cultivating talents. The quality of classroom

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teaching determines the quality of a country's talent training. However, research has confirmed that there are still many problems in Chinese undergraduate classroom teaching. Wei Shi [1] notes the absence of the teaching standards which are the basic norms for teachers to engage in the class teaching, the yardstick to measure the quality of the class teaching, and the breakthrough in the reform of the class teaching. Yan Wu and Yongming Chen [2] highlight that the crisis of undergraduate classroom teaching is widespread with the survey to 6000 from 10 Chinese universities.

In the face of the many problems existing in the undergraduate classroom teaching, many researchers and scholars have proposed different perspectives and strategies. Fan Chen [3] argues that it should establish the student-centered model for promoting the undergraduate teaching reform. Jian Wang and Mingdi Wang [4] note that the breakthrough of the university classroom teaching reform is to change teaching life in university classroom which includes daily life, social life and professional teaching life between teachers and students. On the other hand, in almost all the universities of the world, a set of evaluation system and index has been formulated with the aim to supervise the teachers' teaching behaviours providing the guarantee for the classroom teaching quality. Students' evaluations for the teachers are the essential, because teachers participate directly in the classroom teaching with their own experiences. To meet students' learning needs is the direction of teachers' efforts. Research has also proposed from the students' perspective some measures in order to deal with the inefficient undergraduate classroom teaching. Xianglin Zhang and Aimin Li [5] note that according to the students, teachers should guide them to increase learning inputs and implement some exit mechanism for them.

The connotation of evaluation index represents the standard of classroom teaching quality. When students participate in the evaluation by marking the scale of the indexes, which index is the one that teachers need to strength and what is the standard like for a high-quality classroom teaching? The aim of the paper is to answer these questions.

2 Materials and methods

2.1 Object of survey

The data of the small-scale questionnaire survey were collected within the specific context of higher education in Jiangxi Province of People's Republic of China. Respondents were students of X University who study across a range of subjects within the different normal directions. The intention of the survey is to clarify the different conceptions that students have for a good classroom teaching in higher education and the aspects that teachers need to strengthen most in classroom teaching.

2.2 Method

2.2.1 Questionnaire

After the questionnaire was produced by the Questionnaire Star software, the link (<https://www.wjx.cn/mobile/statnew.aspx?activity=101257299#1>) of the questionnaire was then randomly forwarded to the different students' WeChat (a Chinese communicative software, similar to Whatsapp) groups of X University of Jiangxi Province.

The questionnaire consists of two parts with 5 items: 3 one-choice related to students' essential information, that is, the grade, major and gender and 2 ranking questions. Eventually, the questionnaire was completed and submitted (in Chinese) by 86 students. We

find from the questionnaire that more than half of the respondents are students of the pedagogic major and the rest from other 6 different majors, including economics, history, literature, engineering and so on. Besides, more than 95% of the respondents are undergraduates: 36.05% freshmen, 17.44% sophomores and 41.86% juniors. Among the 86 respondents, there are 70 female students and 16 males.

According to the 5 evaluation indexes (refer to a notice on the evaluation method of undergraduate classroom teaching quality issued by the X University in 2016) which students must fill out before selecting courses for the coming semester, the 2 ranking questions of the questionnaire involve the ranking of the importance of five evaluation indicators and that of the aspects to be strengthened by teachers from the perspective of students. Before the mass distribution of questionnaires, 4 volunteer students were asked to fill out the questionnaire and they had no difficulty understanding how to do the job and what the purpose of the survey is. The content of the questionnaire is valid.

The average comprehensive score of the ranking questions is automatically calculated on the Questionnaire Star System according to the ranking of all the respondents. It reflects the overall ranking of the options. The higher the score, the higher the overall ranking. The calculation method is as follows:

the average score of the integrative stations of the options = $(\sum \text{frequency} \times \text{weight value}) / \text{the number of people filling in this questionnaire}$

The weight is determined by where the options are arranged. For example, if there are five options involved in sorting, the first position has the weight of 5, the second position has the weight of 4, and the third position has the weight of 3 and so on. If A question is filled out 12 times in total, option A is selected and placed in position 1 twice, position 2 four times, position 3 six times, position 4 seven times and position 5 twice, the average composite score of option

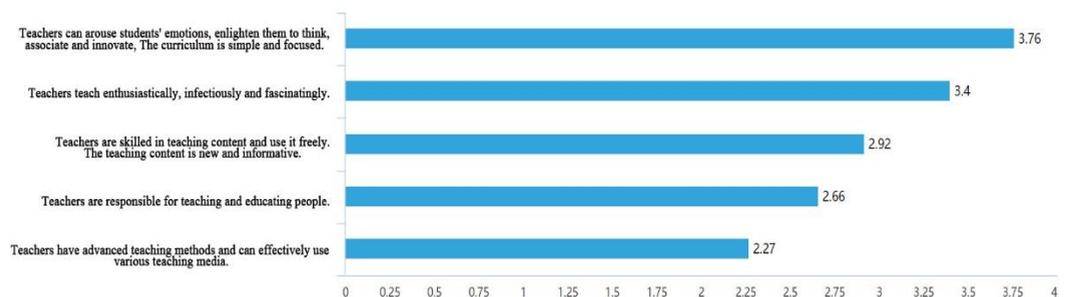
$$A = (2 \times 3 + 4 \times 2 + 6 \times 1 + 4 \times 7 + 5 \times 2) / 12 = 4.83 \text{ points.}$$

The results of the questionnaire are given as follows:

Figure 1 The aspects to be strengthened by teachers are arranged in descending order



Figure 2 In descending order in terms of importance.



2.2.2 Interview

In addition to the questionnaire, two focus groups of students from X University accepted the interview, one is composed by 5 female graduates and the other by 4 male juniors. Except for that, five students were interviewed separately. All the interviewees came from different majors and different classes. Before answering questions, the students must submit the questionnaire on the spot. The intention of the interview is to clarify what a classroom teaching of good quality is like; which aspect teachers need to strengthen the most and why; which aspect teachers need to strengthen the least and why. The information obtained from the interview is classified according to the structure of the questionnaire. In the follow-up analysis of the questionnaire results, some supplementary explanations are made by referring to the interview content of the students in the focus groups. The interview questions are given in Appendix 2.

3 Results and Discussion

3.1 The unity between imparting knowledge and educating people

According to the questionnaire, 45 respondents of 86 consider that being serious and responsible, imparting knowledge and educating people are the most important indexes/factors within the five evaluation indexes designed by the Academic Affairs Office of X University. It means that the students of X University attach great importance to the teachers' teaching attitude when they evaluate the classroom teaching quality. Teaching attitude is considered as the "major promise", as proposed by one student of the focus groups, without it, other four evaluation indexes will not be performed. One student took also the Masnaot's hierarchy of needs as an example, he categorized the attitude of being serious and responsible, imparting knowledge and educating people into the first need by satisfied. Thus, it is neither contradictory that one student of the focus groups puts it on the back burner considering it as the least important among the five evaluation indexes, because he regarded it as the basic requirement for being a teacher.

Imparting knowledge and educating people are indeed the missions of a teacher. In the 1950s, the Communist Party of China clearly put forward the slogan of "imparting knowledge and educating people" in colleges and universities which have roughly undergone three stages since the reform and opening up in 1980s: dominated by the propaganda department, dominated by the personnel department and dominated by the teachers' comprehensive management department, reflecting different work priorities and management characteristics, such as ideological advocacy, professional requirements and collaborative requirements. [6] In the teacher-student symposium held in the Beijing Normal University in 2014, Chinese President Xi Jinping emphasized that teachers should always bear in mind the missions of imparting knowledge and educating people and guiding the students' minds with personality charm. In addition, at the National Conference on Ideological and Political Work in Colleges and Universities carried out in 2016, Xi Jinping gave prominence to the unity between imparting knowledge and educating people and the importance of teachers' virtue in teaching. The chairman's speech reminds us that teachers' personality charm and virtue become crucial factors which can contribute to the classroom teaching quality.

Even so, the current study shows that in the actual classroom teaching of X University, the index of being serious and responsible, imparting knowledge and educating people is relatively less fulfilled, because in the ranking list, this index ranks at the third position (2.92) in terms of improvement, it means that from the students' point of view, teachers have not done enough. The extreme cases in which the teachers read the content of Power Point (PPT) and the students don't even understand what the teachers are talking about illustrates the

irresponsibility and perfunctory. The worst case is the one in which the teacher uses the same PPT for two different courses. Fortunately, there are meantime many responsible teachers, since the focus group students gave also some examples of serious and responsible teachers.

If the phenomenon of irresponsibility of teachers can be recognized easily, the separation between imparting knowledge and educating people don't seem to be considered a problem for teachers. Although imparting knowledge and educating people request that educators should love, respect and care for the students apart from transferring knowledge, some complaints of the students in the focus groups would provide the evidence that not all the educators have done it well. Some examples show that some teachers ignore the importance of teachers' virtue on the classroom teaching quality. As proposed by a female senior student during the interview: "I hope that teachers would respect us fully and at the same time they can supervise our behaviours in the classroom. For example, when we use mobile phones in the midst of his/her teaching in class, instead of expelling us from the class, the teacher can instead remind us not to do it". Another example from the same student can also give the confirmation when she looked back upon her unpleasant experience: "I took a course called the *Psychology of Happiness*, but I felt unusually painful, because the teacher is male and through his evaluation of women, I had a sensation of not being respected as female."

This case can well illustrate the difference between imparting knowledge and educating people, which is also one of the important propositions of President Xi [7]. How to unite the two aspects? The President Xi gives special importance to the virtue of teachers, just in line with the Chinese traditional culture. The teachers' self-cultivation is the foundation of personality charm which contribute to classroom teaching quality. As mentioned above, the teachers' personality charm can also be the guide of the students' mind. The focus group students also agreed with this point and they provided the verification with their own experience. They stated that a teacher's personal charm was just as important as his professionalism. One student expressed her fondness for some teaches: "I think the personal charm is also very important. Just like the teachers who I met in the junior year. They are also very humorous using the examples from everyday life to explain the problems in writing. Besides, they passed to us the positive energy which is very important to the university students. They encouraged us to work hard. I felt great in class". Another student gave his support pointing out that the teachers' personality charm was the most attractive point for students. He indicated that for a teacher like that, no matter what course he offered, there would be always many followers. Thus, it can be seen that imparting knowledge and educating people are two missions inseparable for the teacher.

3.2 The effective use of teaching media is the least important for the teaching classroom quality

The relationship between technology and education has always been a contentious issue. Different views on the relationship between technology and education lead to different attitudes towards technology, and they definitely have different effects on education. Zhuli Wang [8], professor of Sun Yat-sen University, proposes that from a historical perspective, technology has had a revolutionary impact on education reform, but it does not mean that today's education should be technology-centered. It's better to seek the balance and combination point between technology and education. [9]

The success of Power Point (PPT) is the result of the convergence of multimedia technology and education. Besides, the application "Rain Classroom" developed by the Tsinghua University is being promoted in Chinese universities because of its powerful interactive features, with which, the students can use the mobile phone for answering questions and sending barrages. In this case, the interaction between teachers and students has become more frequent and active. In the 2017, after the observation in a classroom

teaching, Baosheng Chen, Minister of Education of China, expressed that the mobile phone was no longer a tool to make students bow their heads, but a powerful tool to make students look up. [10]

No matter what type of application be used for the classroom teaching, the main goal is to improve the classroom teaching quality. Whether the advanced nature of teaching multimedia will certainly improve the classroom teaching quality?

The result of the questionnaire survey showed that students considered that the evaluation index which requires that teachers adopt advanced teaching methods and can effectively use all kinds of teaching media is the least important and last thing a teacher needs to improve within the five. Two observations could be inferred from the report. One is that the use of the technology is not the critical factor which influences the classroom teaching quality. As suggested by two of focus group students, “I think that it [the teaching multimedia] doesn't really matter and it is not important when you only have your own teaching materials without PPT or multimedia”. Some students of focus-group even prefer writing on the blackboard to the Power Point, because on the one hand, it is convenient for students to take notes; on the other hand, it can help students to concentrate on the teaching content. In addition to this, the focus-group students also referred to the disadvantages of the use of teaching media. For example, one student commented: “I think that when teachers use Power Point, they will read the content according to the slides of PPT, in this case there is no necessary that they are familiar with the teaching content. When my teachers used the Power Point, I felt that the knowledge passed away like a movie. I prefer the teachers who write on the blackboard”. These comments suggest that the use of teaching media in teaching classroom must respect the students' learning way and characteristics. Teachers should consider the teaching practice of different courses when they design the course, rather than thinking purely from the perspective of technology.

Another observation can be inferred from the survey is that teachers have done enough in terms of using teaching media in teaching classroom. As mentioned above, the use of Power Point is very popular in classroom teaching in Chinese universities. There is also the tendency to extend it to the middle school. It is suggested that the key to improve the teaching classroom quality does not depend only on the effective use of teaching media or teaching method, but other more important contributing factors, including teaching attitude, teaching content, teaching theory and teaching enthusiasm.

3.3 Students attach great importance to the acquisition of knowledge in classroom

On the ranking list of the five evaluation indexes, the importance ranking the second is referred to the teaching content, that is, the teacher should be proficient in the teaching content and use it freely. Besides, teaching content should be updated and contain a large amount of information. While three female and one male students of the focus-group considered teaching content as the first important evaluation index within the five indexes, because they supposed that acquiring knowledge was the most important for students, no matter how about the teaching attitude or other abilities of teaching. In addition to this, they think that teachers must pass on what students have to learn, especially for novice teachers who are lack of experience in other abilities.

During the interview, teaching content is often referred to as the solid cargo (“Ganhuo 干货” in Chinese) which means no bullshit, no “chicken soup” in the teaching content. They should be refined, practical and credible, as opposed to gray market goods. When students of focus group talked about what should be a classroom teaching of good quality, they considered the “Ganhuo” as its main characteristic, that is, teachers must let the student learn knowledge. In addition, the students of focus groups who study the pedagogic pointed out

emphatically that the teaching content can not be decoupled from social practice and the theory should be combined with practice.

Using cases and stories for presenting the teaching content is also very helpful for students to understand better teaching content. As told by a student of pedagogic during the interview: "I like so much the cases proposed by teachers in classroom teaching, especially when teachers add their own experience to the teaching content and then ask us to talk about our opinions, because I have a deeper understanding of the teaching content". The interesting teaching content can sometimes trigger spiritual interaction between students and teachers. On the contrary, theory becomes boring when teachers follow just the content of textbook or the Power Point. At the same time, the updating of knowledge is also the standard of a good teaching classroom quality. In this case, teachers must have profound knowledge, as the metaphor mentioned by one focus-group student: when teachers want to give students a drop of water, they must prepare a bucket of water.

Even worse, the students from the focus groups complained that some teachers yet didn't understand what they were talking about. This kind of phenomenon is more likely to happen in public classes. In addition to this, some teachers used the PowerPoint which would never be changed in "ten thousand years" (an exaggerated statement used by students). Thus, it is not strange to find that this index took up the third place in the ranking list of what teachers need to improve.

3.4 The lack of enlightenment of thought and the effective interaction in teaching classroom

The results of the questionnaire show that "mobilizing students' emotions, inspiring students to think, associate and innovate, explaining profound theories with simple language and giving prominence to the key points" are the evaluation indexes that teachers need to strengthen most among the five. Seven students of focus group gave also their support to this point during the interview, considering many classes of X University as flat as water without communication and collision of ideas between teachers and students, especially in many public courses. One of them exclaimed: "I feel that there are a few of classes in which teachers can mobilize students' emotions and inspire students to think, association and innovation. I don't like, for example, the course about Chinese politics. Why the teacher couldn't link the theory with the Chinese reality and lead us to think about what does our country need? But he just read the content of Power Point." Another student of focus group added: "I think that in a teaching classroom, the quality consist in that a student can be stimulated to think and reflect, because just when students do this, they can form their own ideas and opinions".

Chuting Zhang [11], professor of Hunan Normal University puts forward what a good class is in terms of asking questions. He argues: A class can be considered good when teachers are able to carry a pocket full of questions in classroom teaching. It's more of a good class when teachers can arouse the students to ask questions. It's the best class when teachers can't be able to answer the student's question, not because they are not prepared, but just because the questions are fantastic and profound. It is true that effective questioning can lead to good interaction between teachers and students, but not for the sake of asking questions. Some similar examples were also given by the students of focus group, in which, the questions were too easy to be answered by students.

Jiangyong Gao [12] emphasizes the importance of the interactive teaching, through which learning needs and learning obstacles can be explored and supposes that according to learning needs the teacher should give precise teaching guidance, carry out in-depth interaction and deep drilling at learning obstacles, making their learning from close to openness and constructing the interactive teaching mode with sense of benefit. Just in this case, the high-

quality undergraduate teaching occurs. Tiefang Liu [13], professor of Hunan Normal University proposed from the philosophical perspective: “The complete dialogue was to turn to what people are talking about through opening up to each other; the ideal dialogue contains the triple connotation, that is, as the way of communication, the way of thought and the way of life at the same time. When teachers and students are opened up to each other, the high-quality undergraduate teaching are occurred. The example given by students of focus group can also confirm it. One student of focus group confided: “I have a teacher who didn’t like to ask questions, but it was very interesting when we followed her lessons, because there was a communication of mind between us. For example, when she talked about a historian, she told us that the historian didn’t want to be it before and all the class was very excited, because she looked like a presenter of the variety show.” As stand for by Parker Palmer [14]: inner spiritual interaction can help teachers to bond with their students and empower them to resist threats that undermine real teaching.

4 Conclusions

4.1 Strategies for improving classroom teaching quality in Chinese universities: From Students’ Perspective

The above analysis of the results highlights some factors that contribute to the high quality of undergraduate teaching from the students’ perspective, including the personal moral cultivation unvalued by teachers, more attention to the indoctrination of knowledge, the ignored mind inspiration of students and the effective interaction between teachers and students. At the same time, it can be found that the use of the multimedia has little effect on the classroom teaching quality. If we want to improve the classroom teaching quality, we must do more things to make up for these deficiencies. Are there any strategies? The paper tries to put forward some ways based on the research of other scholars.

The first consists in changing the concept of teaching and learning which refers to the basic understanding and belief of the essence and process of teaching, formed gradually by the teaching subject (including teachers and students) in the long process of teaching and learning based on the past experience. The answers given by the focus group students showed that in undergraduate teaching classroom, it’s important the imparting knowledge, but not limited to that. They also value the teacher’s personal moral cultivation and their ability to enlighten the students' thinking and dialogue with them. However, it appears that teachers are not aware of these needs of students, otherwise, students didn’t complain the lack of them. The reason behind this phenomenon is that teachers and students have different concept about teaching and learning. Qizong He and Xiaoqiang Liu [15], professors of Jiangxi Normal University claimed also that the incompatible teaching idea may cause the deep-seated teaching and learning obstacle. It is obvious that the students’ concept of learning has been changed, that is, they consider the learning as “abstracting meaning” or “interpretative processes with the goal of understanding the real world”, rather than the increase of knowledge or the memorization. The correspondent concept of teachers’ teaching should be new, with which teachers pay more attention to the improvement of students' ability to explore, think and innovate, and meet their internal needs for understanding. Only by doing so can high quality classroom teaching take place.

Another strategy can start with the teaching techniques towards the integrity of life, proposed by the professor Liu [16] who claims that teaching as an art of guiding individuals to be a good person, its root lies in how to open the individual life wholly, to realize the individual as the physically-natured, psychologically-socialized and culturally-spiritual existence, which makes the teaching not only as a knowledge giving activity, but rather to guide the individual to become an integrated well-developed person through teaching. In this

perspective, students' subjectivity is highlighted in class. Any reaction of students in class, especially that unexpected, will become the opportunity of education. Yunchuang Dong and Yundu Shen [17] also supposed that teachers must participate to students' unexpected behavior in order to improve their classroom teaching.

A shift in perception leads to a change in behavior. For example, in terms of how to improve the quality of thinking in the classroom, Zhengmei Peng [18], professor of East China Normal University, along with his colleagues examined an argumentation-based learning-phrases-oriented model. With this model, in the classroom teaching, the teacher's monologue turns into a dialogue between teachers and students; learning to argue turns into arguing to learn. With the shift of the perception, more and more teachers and scholars will propose effective teaching strategies for improving the undergraduate classroom teaching quality.

4.2 Prospect for further study

Finally, this study has just examined the condition of one Chinese university and been limited in a small number of students. As proposed by Kangning Wu [19], professor of Nanjing Normal University, "any complicated case rich in content cannot present a 'complete picture of the whole society', a case is, after all, merely a mirror through which researchers look at themselves and the world where the case is placed".

However, it can be summarized that the future research will be investigating what a high-quality classroom teaching is like from the perspective of teachers, what the inherent teaching concepts of teaching and learning are, what the inconsistencies between teachers and students in teaching concepts are. If there is no incompatibility in theories, what factors then affect the classroom teaching quality in reality?

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