
| RESEARCH ARTICLE

Approach to Improving the Teaching Effect of General Education Course of Humanities in Research Universities: Taking South China University of Technology as an Example

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| ABSTRACT

General education of humanities has been implemented in China's colleges and universities for nearly 30 years, but so far, there are not many studies on the teaching of general education courses of humanities, among which the study on improving the teaching effect of general education courses of humanities, especially the study based on empirical evidence, although is very necessary, is even rarer. In order to explore the approach to improve the teaching effect of general education courses in humanities, in the past 9 semesters at South China University of Technology, a research-oriented university in China, the author of this paper carried out teaching exploration in a total of 14 large classes, and 23 small classes taught by himself, with 3094 undergraduate students enrolled, in three general education courses of humanities, namely "Anglo-American Literature and Culture", "Selected Readings of English Poetry", and "Tasting Chinese Classics in English", by implementing four teaching modes in classroom teaching: topic+interactive, topic+non-interactive, non-topic+interactive, non-topic+ non-interactive. It is found that topic-centered interactive small class teaching achieves the best teaching effect. At the same time, surveys and investigations conducted by the author of this paper on the teaching of general education courses of humanities at South China University of Technology demonstrate that interactive small class teaching taught by teachers with professor titles achieves optimal teaching effect. It can be thus concluded that the topic-centered, interactive small class teaching taught by a professor is the best approach to improve the teaching effect of general education courses of humanities in a research university. It is expected that the findings of this study will serve as a reference for other research universities in China to improve the teaching effect of general education courses in humanities.

| KEYWORDS

Research universities; general education course of humanities; teaching effect; South China University of Technology

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1. Introduction

Nowadays, the importance of general education in college's talent cultivation is self-evident. General education courses have been provided in China's colleges and universities for nearly 30 years since the early 1990s (Zhou, J-X, 2016), and so far, the general education system in China's colleges and universities, especially in high-level universities, is relatively complete and mature, with almost all the courses that should be offered included. However, this does not mean that the operation effect of this complete system is satisfactory.

1.1 Problem Statement

In other words, there is still much room for improvement in general education in Chinese colleges and universities. Namely, the teaching effect of quite a number of general education courses is not ideal, which is mainly reflected in the fact that many students choose the courses but do not attend the lectures, the truancy rate is high, and the class attendance rate is low, and the phenomena

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of perfunctoriness are serious. It was even pointed out that "the attendance rate of general education courses is only 40%" (Zhang, 2011). In terms of teachers, quite a number of them lack in-depth research and, with insufficient investigation, apply improper teaching methods in teaching and thus achieve poor teaching effects. Some researchers attributed this situation to the insufficient attention paid by teachers and students, as well as the low-level management of colleges and universities' administrative departments, which leads to problems in three aspects, namely, "the quality of the course is not high, the student's interest in learning is not strong, and the teaching management is not in place" (Jiang et al., 2015). These problems of general education in colleges and universities not only seriously affect the cultivation of talents but also affect the normal education and teaching order (Fang, 2015). The author of this paper has been engaged in the general education of humanities in university for more than ten years and has constantly been seeking countermeasures to various related problems encountered, hoping to keep pace with the times and improve the teaching effect (Zhou, 2014).

The author of this paper believes that among the three major factors of general education problems, i.e., teachers, students, and college management, the teacher factor is the key element. Therefore, he believes that one should mainly seek breakthroughs in teachers to improve the current predicament of general education in colleges and universities. The lack of students' motivation to learn is mainly caused by external factors, and students who are unwilling to seek knowledge are extremely rare; while the college's management is dynamic and will continue to improve over time, and management mainly plays an auxiliary role in guaranteeing, promoting and motivating teaching, and cannot directly improve the teaching effect of general education. However, the teacher is the factor that has a more direct impact on the teaching effect, such as teachers' academic and teaching level (skills), teaching attitude, ability to control classroom activities, etc., all directly affect the teaching effect. Therefore, how teachers face the students in the classroom and the current management status and find an appropriate approach to improve the teaching effect has become one of the keys to solving the current dilemma of general education in colleges and universities. After all, the key to improving teaching lies in teachers.

1.2 Research Question

As a teacher at the research university, South China University of Technology, in the past four and a half years and a total of nine semesters, the author of this paper has, on the one hand, conducted teaching practice in three general education courses taught, looking for ways to improve the teaching effect, and on the other hand, organized research team to investigate the overall teaching situation of general education courses of humanities in the South China University of Technology and the wishes of students, in order to discover relevant characteristics and laws to feedback and verify teaching practice. The main purpose is to explore the best approach to improve the teaching effect of the general education of humanities. In the course of several years of research and investigation, a number of staged results have been published. This paper is a summary of the teaching practice exploration in the past 9 semesters, trying to solve this problem: What is the effective way to improve the teaching effect of general education courses of humanities in China's research universities?

1.3 Significance of the Study

There is no doubt that improving the teaching effect of general education courses of humanities is of great significance for enhancing students' humanistic literacy, promoting students' all-round development, and improving the quality of talent cultivation. Besides, in the current situation where there is a lack of study on improving the teaching effect of general education courses of humanities, the study of this paper is even more necessary and important.

2. Literature Review

Although China's colleges and universities have carried out general education in humanities for nearly 30 years, most colleges and universities have set up a system of general education courses in humanities, some of which have been implemented for many years; however, there is not much research on the teaching of the general education course of humanities. Searching the China Knowledge Infrastructure (CNKI), the biggest database of publications in China, 119 related papers could be found with the theme of "general education course of humanities", of which only 84 are themed "general education course of humanities in colleges and universities". Some of these papers discuss the nature and orientation of general education courses in humanities (Li, 2010; Huang, 2014; Chen, 2015; Yang, 2021); some make a comparison of general education courses in humanities at home and abroad (Xian, 2003; Zhou&Zhou, 2009; Zhou&Nie, 2013; Liu, 2013; Wu &Peng, 2017); some analyze the current situation of the general education course of humanities in China's colleges and universities (An et al., 2014; Zhou, L-Y, 2016; Gao&Yang, 2016; Jiang, 2017; Liu, 2018; Cui&Feng, 2018; Fang, 2019; Zhou, 2021); some discuss the construction of curriculum system or module of the general education course of humanities in colleges and universities (Zhang&Xu, 2004; Li, 2016; Zhao, 2018; An, 2019; Feng, 2021; Ma&Li, 2021; Shen&Wang, 2021; Weng&Cheng, 2021). Some papers introduce the reform of general education courses of humanities in universities and summarize the outcome of the reform, but there is no discussion on how to improve the teaching effect (Deng&Yang, 2010; Sun, 2016; Huang, 2017; Lian, 2017; Wang, 2019; Yu, 2019; Feng, 2020; Pan, 2021).

There are, of course, a few papers discussing the teaching mode of the general education course of humanities. For example, scholar Li Jia suggested implementing a differentiated education mode for students in the three major categories of liberal arts, science, and art (Li, 2017), Chen Yonghong and Zhang Yaquin suggested that facing the current situation of an insufficient number of teachers for general education course of humanities, private higher vocational colleges should adopt the teaching mode of MOOCs (Chen&Zhang, 2016). Jia Dengping suggested learning from the idea of "Internet + education" and adopting a mixed teaching mode based on MOOCs, campus network platforms, QQ and WeChat, and other mobile communication platforms in the general education of humanities (Jia, 2019); while there are few practical explorations focusing on improving the teaching effect of the general education course of humanities.

Scholar Shen Yanhong pointed out that the current general education classes in higher vocational colleges lack "effective teaching" due to vague teaching objectives, narrow teaching content, backward teaching methods, and the dislocation of classroom teaching roles. She also put forward suggestions for improvement, but her research is rational in nature and not supported by empirical data (Shen, 2013). Researcher Wang Gang conducted a questionnaire survey on 40 students in two classes who took different general education courses to evaluate the effect of the school's "Erya General Education System" and put forward suggestions for improving the teaching effect, namely, optimizing teaching content, improve students' interest in learning, and establish a reasonable evaluation system, but there is no specific opinion on how to achieve it (Wang, 2013). Researcher Lu Hangbo surveyed 306 students from the School of Chemical Engineering, China University of Petroleum (Beijing), and found that students' course selection motivation is the most important factor affecting students' learning attitude and suggested optimizing the curriculum of general education courses of humanities to improve students' interest in learning (Lu, 2016), thereby improving teaching effect, but the research focuses rather on how to improve student's learning attitudes.

To sum up, it can be seen that studies on improving the teaching effect of the general education course of humanities in colleges and universities, especially the studies based on empirical evidence, are still insufficient.

In the past few years, the author of this paper has organized a research team at the South China University of Technology to conduct an in-class survey of 62 general education courses of humanities, reflecting on the teaching methods and teaching effect of general education courses in humanities (Zhou et al., 2014; Zhou et al., 2015). Given that the attendance rate is a basic indicator for judging the quality of study style (Wang&Cai, 2015), the author of this paper surveyed 67 general education courses of humanities through questionnaires and class-attending, to investigate the characteristics and reasons of the attendance rate of general education courses of humanities (Zhou, J-X, 2016) as well as the various factors affecting the attendance rate (Zhou &Lin, 2016a); Through questionnaires and surveys of 167 general education courses of humanities, the influence of the factor of teacher on the class attendance rate was discussed (Zhou&Yang, 2016), the influence of teacher factor and other classroom factors on the class attendance rate were investigated (Zhou&Lin, 2016b), and the influence of subjective and objective factors involved in teaching on the attendance rate was evaluated (Zhou&Lin, 2018), and found that the three factors of teacher's professional title, classroom activity, and class size have the most obvious impact on the attendance rate of general education courses of humanities (Zhou, Yang &Hua, 2016). The survey also found that "the two most effective ways to improve the teaching effect of general education courses of humanities are to improve classroom activity and small class teaching", and in addition, the rate of listening to the lecture in class will be higher when taught by professors (Zhou, Yang&Hua, 2017). These findings are obtained on the basis of investigating the teaching of general education courses of humanities at the South China University of Technology and conducting a questionnaire survey on students who take the general education courses of humanities. However, what will be discovered through the exploration of the author of this paper in his own teaching practice? Is it consistent with the findings of the survey, thereby validating each other?

Therefore, in the past four and a half years (i.e., 9 semesters), while organizing the surveys on general education courses of humanities at South China University of Technology, the author of this paper has at the meantime continually engaged himself in classroom teaching general education courses of humanities, implemented four teaching modes in classroom teaching in order to find the optimal teaching mode by comparison, and by referring to the survey findings, finally summed up the effective teaching mode of improving the teaching effect of the general education course of humanities. After a period of reflection and observation, the practical exploration process and findings are now summarized as follows.

3. Research Process

Through classroom teaching practice, the author of this paper implements, in his teaching, four teaching modes in both large and small classes of general education of humanities, and at the meantime, organize a research team to observe, count, and compare his classroom teaching effect, in order to test and find out the optimal mode of improving the teaching effect of general education courses of humanities.

3.1 Sample and Data Collection

In the past 4 and a half years (i.e., a total of 9 semesters), the author of this paper has taught three general education courses of humanities at South China University of Technology, namely "Anglo-American Literature and Culture", "Selected Readings of English Poetry", and "Tasting Chinese Classics in English". He had taught a total of 37 classes, including 14 large classes and 23 small classes, with 3094 students enrolled. The students mainly grade 1-3 undergraduates majoring in science and engineering at the South China University of Technology, with a very small number of grade 4 students.

According to the practice of the university, a class of 120 students in a general education course is defined as a standard large class, and a class of 50 students is called a standard small class. Given the actual situation of the teaching practice of the three courses, in this study, the class with 100-130 students is called a large class, and the class with 50-60 students is called a small class. In the past 9 semesters, the number of classes and the number of students in each class of the three courses are shown in Table 1:

Table 1: Number of Classes and Students for 3 Courses in 9 Semesters

Semester	Courses and Number of Classes and Students					
	Anglo-American Literature and Culture		Selected Reading of English Poetry		Tasting Chinese Classics in English	
	Number of Class	Population	Number of Class	Population	Number of Class	Population
1st	3	379				
2nd	3	385	2	254		
3rd	2	248	1	127		
4th	4	232	2	112		
5th	3	165	1	58		
6th			3	378		
7th	4	232				
8th	4	236			1	57
9th	4	231				
Total	27	2108	9	929	1	57

Among them, the number of large and small classes and the number of students respectively enrolled in the three courses are shown in Table 2 as follows:

Table 2: Number of Large and Small Classes and Students for 3 Courses in 9 Semesters

No.	Course	Large Class		Small Class	
		Number of Class	Population	Number of Class	Population
1	Anglo-American Literature and Culture	8	1012	19	1096
2	Selected Reading of English Poetry	6	759	3	170
3	Tasting Chinese Classics in English			1	57
Total		14	1771	23	1323

According to the statistics, as shown in Table 1 and Table 2, there are 37 classes in the three courses, with 3094 students enrolled. The 37 classes include 14 large classes and 23 small classes. Two of the three courses have both large and small classes. The course "Anglo-American Literature and Culture" has the largest number of classes.

3.2 Research Design

Four teaching modes are used in the small and large classes of each course. These four teaching modes are based on the combination of two elements of interaction and topic, namely: topic + interactive mode, topic + non-interactive mode, non-topic + Interactive mode, and non-topic + non-interactive mode. These four teaching modes include four key factors, namely topic-centered, non-topic-centered, interactive, and non-interactive.

The so-called 1) Topic-centered means that the teacher condenses the content under 1-2 topics in each classroom teaching or prepares 1-2 topics, incorporates the content into the proposed topics, and focuses on those 1-2 topics in each classroom teaching. In this way, the teaching content is centralized and complete, which is convenient for the teacher to explain in depth and the students to memorize and understand, and it is easier to guide the students to follow the teacher's ideas and progress. 2) Non-topic-centered means that in each classroom teaching, teachers mainly follow the pre-set teaching content arrangement and teach them to students in sequence, without deliberately condensing the content into 1-2 topics, nor formulating 1-2 topics into which the content is incorporated and taught together. Topics and non-topics are basically the same in teaching content, but the teaching style is different. One is concise and focused, and the teacher has made a certain coherent treatment of the content; the other is distinctive in its clear and original order of the content, which is not processed or synthesized during the teaching process. 3) Interactive teaching means that teachers intentionally and actively organize such classroom activities as teacher-student question and answer, discussion, seminars, etc. in classroom teaching so as to enhance students' classroom participation and promote students' thinking and understanding of what they have learned. 4) Non-interactive teaching refers to classroom teaching in which teachers pay more attention to their own lecturing and seldom organize activities that are conducive to the communication between teachers and students and reflect on what they have learned. The connotation of each key factor in the four teaching models is shown in Table 3 below:

Table 3: Connotation of the Key Factors in the 4 Teaching Modes

Topic	Non-Topic	Interactive	Non-Interactive
Each classroom teaching revolves around 1-2 topics	Each classroom teaching does not revolve around any specific topic	Teacher-student interaction in classroom teaching, including discussions, questions & answer sessions, etc.	Basically no teacher-student interaction in classroom teaching, with a teacher lecturing from the beginning to the end of the class.

The author of this paper basically adopts four teaching modes for practical exploration in the large and small classes of each course so as to compare the teaching effect of the four modes in the large and small classes of each course. The statistics of the implementation are shown in Table 4 and Table 5, respectively:

Table 4: Implementation of 4 Teaching Modes in 14 Large Classes

No.	Teaching Mode	Number of Class	Population
1	Topic + Interactive	4	505
2	Topic + Non-interactive	3	384
3	Non-topic + Interactive	3	381
4	Non-topic + Non-interactive	4	501
Total		14	1771

Table 5: Implementation of 4 Teaching Modes in 23 small Classes

No.	Teaching Mode	Number of Class	Population
1	Topic + Interactive	9	517
2	Topic + Non-interactive	5	291
3	Non-topic + Interactive	4	227
4	Non-topic + Non-interactive	5	288
Total		23	1323

As shown in Tables 4 and 5, in the past 9 semesters, there have been 37 classes (23 large classes+14 small classes) for the three general education courses of humanities, i.e., "Anglo-American Literature and Culture", "Selected Readings of English Poetry", and "Tasting Chinese Classics in English", in which four teaching modes have been implemented. The details are as follows:

- 1) Topic + Interactive: Teaching exploration was carried out in 13 classes (4 large classes + 9 small classes);
- 2) Topic + non-interactive: Teaching exploration was conducted in 8 classes (3 large classes + 5 small classes);
- 3) Non-topic + interactive: teaching exploration was carried out in 7 classes (3 large classes + 4 small classes);
- 4) Non-topic + non-interactive: Teaching exploration was conducted in 9 classes (4 large classes + 5 small classes).

4. Findings and Discussion

In the past four and a half years, the author of this paper organized a research team to continuously observe and make statistics on his own classroom teaching practice and summed up the teaching effect of the four teaching modes in large and small class teaching. The research team divided the teaching effect into four grades: excellent, good, moderate, and poor, and defined the four grades as follows:

Excellent: The class attendance rate is not less than 90% and more than 80% of the students listen to the lecture in class carefully and keep thinking. (Note: The so-called thinking refers to students thinking while listening to the lecture in class or promoting thinking through participation and interaction)

Good: The class attendance rate is not less than 90%, and 70%-80% of the students listen to the lecture in class carefully and keep thinking; or the class attendance rate is between 80%-90%, and more than 90% of the students listen to the lecture in class carefully and keep thinking.

Moderate: The class attendance rate is not less than 90%, and 60%-70% of the students listen to the lecture in class carefully and keep thinking; or the class attendance rate is between 80%-90%, and more than 80%-90% of the students listen to the lecture in class carefully and keep thinking.

Poor: The class attendance rate is not less than 90%, and less than 60% of students listen to the lecture in class carefully and keep thinking; or the class attendance rate is between 80%-90%, and less than 80% of students listen to the lecture in class carefully and keep thinking; Or if the attendance rate is below 70%, the teaching effect is also regarded as poor.

Regarding the rate of attendance, the rate of listening to the lecture in class, and the thinking while listening to the lecture, in several years of classroom teaching practice, there were always 2-3 members of the research team who attended each lecture in each class, observing classroom teaching and recording relevant data. The research team also, at the same time, investigated the relevant situation of the general education courses of humanities of the whole university, accumulated a large amount of data, and conducted a study on the relationship between the attendance rate, the stability rate of attendance, the rate of listening to the lecture in class and the teaching effect (Zhou, Yang&Hua, 2017).

Since the general education course is an elective course other than specialty courses, the overall attendance rate and the rate of listening to the lecture in class are not as high as those of specialty courses. Given the nature of the course and the actual situation of general education teaching at the South China University of Technology, the research team delineated the above teaching effect grade standards. Referring to the above grade standards, the teaching effect of the four teaching modes in large and small classes in the past 9 semesters is summarized. The specific effect and analysis are as follows:

4.1 Topic + interactive mode: small classes are excellent, large classes are good

Practical effect: In 9 semesters, this teaching mode was implemented in classroom practice of 13 classes, including 4 large classes and 9 small classes. The practice has shown that topic-centered interactive teaching in small classes can achieve excellent teaching effects, while in large classes, topic-centered interactive teaching is also conducted, but the teaching effect generally only reaches a good level.

Effect analysis: Based on the observation and records of the classroom teaching practice, the main reasons for the excellent effect of the topic-centered interactive small class teaching can be generalized as follows:

- 1) Since each classroom teaching is focused on 1-2 topics, it is convenient for teachers to lecture in-depth and thoroughness, easy to attract student's attention, and easy for students to understand and follow up;
- 2) Through interactive teachings, such as questions & answers or classroom discussions, it is easy to grab students' attention and maintain their concentration and thinking in classroom teaching;
- 3) Since the class size is small, teachers can pay attention to each student, which is also conducive to attracting the attention of all students and encouraging all students to participate in classroom interaction. In fact, some scholars have proposed that small class teaching is conducive to creating a cohesive teaching community (Zhou, L-Y, 2016).

Therefore, the effect of topic-centered interactive small class teaching achieved the best teaching effect in the classroom teaching practice of the four teaching modes. However, in large class teaching, although a topic-centered interactive teaching mode is also adopted, the teaching effect is quite different:

1) Focusing on 1-2 topics in each classroom teaching is indeed conducive to promoting students' attention to listening, understanding, and follow-up and plays a positive role in promoting the teaching effect.

2) However, due to the large number of students in a classroom, the effect of classroom interaction is greatly reduced. Teachers are unable to divide the whole class into one discussion group but often into several discussion groups, which has a certain adverse impact on the overall discussion effect. In addition, if the teacher adopts the interactive method of question-and-answer, due to the large size of the classroom, it is difficult to ask questions to the students in the back row of the classroom, and it is difficult for the students in the back row to hear the questions to the students in the front row, which affects the overall interaction effect of the whole class; thus it is not conducive to the improvement of teaching effect.

3) Due to a large number of students and the large classroom space, it is difficult for teachers to pay attention to each student, and it is impossible to guarantee that every student will listen to the lecture and keep thinking and understanding properly.

Therefore, the effect of topic-centered interactive large class teaching is often only good, not as good as the small class teaching.

4.2 Topic + non-interactive mode: small classes are good, large classes are moderate

Practical effect: In 9 semesters, topic-centered non-interactive teaching practice was carried out in 8 classes, i.e., in 3 large classes and 5 small classes. The so-called non-interactive means that each classroom teaching is mainly based on the teacher's lecturing from the beginning to the end of the class, with hardly any question-answer session or classroom discussions, or any other teacher-student interaction. Teaching practice shows that this teaching mode achieves a good teaching effect in small class teaching but only achieves a moderate teaching effect in large class teaching.

Effect analysis: Under the favorable conditions of topic-focused, in small class teaching, teachers can ensure to pay attention to each student's listening situation and encourage them to listen to the lecture through the line of sight. It is also helpful for the teacher's every move in the lecture to affect students and encourage students to listen to the lecture carefully and keep thinking so as to achieve good teaching results. However, in the case of large class teaching, teachers are unable to use a line of sight and other methods to encourage students sitting in the middle and the back row of the classroom to listen to the lecture. In addition, since the classroom space is quite large, the students in the middle and back rows are far away from the teacher, which is relatively less affected by the behavior of the teacher. This is also not conducive for teachers to encourage students to listen to the lecture attentively.

4.3 Non-topic + interactive mode: small class is good, large class is moderate

Practical effect: In 9 semesters, a non-topic-centered interactive teaching mode was implemented in a total of 7 classes (i.e., 3 large classes + 4 small classes). The so-called non-topic-centered means that in each classroom teaching, teachers do not focus on 1-2 pre-prepared topics; that is, teachers do not condense the teaching content into topics, and take the topic as the main line, and concentrate on 1-2 topics in each classroom teaching accordingly, but rather, teachers only arranges the content in line with the class hours and time span of the course, and completes the teaching of the predetermined content within one semester. Therefore, non-topic-centered teaching is teaching in the order of the content of the lesson plan, which highlights the continuity and connectivity of the teaching content between the previous and the following lectures, but does not highlight the related topic of the teaching content. Nevertheless, on the basis of ensuring the continuity and connectivity of the teaching content, topic-centered teaching highlights the related topics of the teaching content in each classroom teaching.

Nine semesters of practical teaching show that non-topic-centered interactive teaching is moderately effective in large class teaching and good in small class teaching.

Effect analysis: In the case of non-topic-centered, the teaching content may be less focused, and it is not as good as the topic-centered in attracting students to listen to the class and keep thinking. Therefore, the teaching effect is mainly promoted by classroom interaction and small class sizes. In the case of large classes, the effect of interaction is limited by the fact that there are a large number of students in the class. At the same time, the classrooms of large classes are too large, and the space is wide, which is indeed not conducive to teachers' implementation of teacher-student interaction, and the teaching effect is naturally negatively affected. Therefore, large class teaching will naturally not be more effective than small class teaching. In the practice of this teaching mode, the effect of small class teaching can be good, mainly because the class size is small, and teachers can easily control the interaction effect in the teaching process; while the teaching effect of a large class is only moderate, mainly because the class size is large, and it is difficult for teachers to monitor the classroom interactive process to achieve the desired effect.

4.4 Non-topic + non-interactive mode: small class is moderate, large class is poor.

Practical effect: In 9 semesters, the non-topic-centered non-interactive teaching mode is applied in the teaching practice of a total of 9 classes (i.e., 4 large classes + 5 small classes). The so-called non-topic-centered non-interactive teaching means that teachers do not focus on 1-2 topics in each classroom teaching and do not organize classroom interaction during the teaching process, such as teachers asking students questions, teachers organizing students in discussion, etc. Instead, teachers teach in sequence according to the teaching content preset in the lesson plan. The teaching process does not focus on any specific topic, and basically, no classroom interaction is organized. The practical results show that the teaching effect of this teaching mode is the worst in large class teaching, which is a poor grade, and the teaching effect in small class teaching is not very good, which is a moderate grade.

Effect analysis: The non-topic-centered non-interactive teaching mode loses the advantages of focusing on topics to facilitate teachers to lecture in-depth and thus attract students, and promote students to listen, follow up, understand, and think. It also loses the effect of capturing students' attention through classroom interaction, promoting students' participation and actively thinking and comprehending, and so the results of teaching are naturally not ideal.

Fortunately, in small class teaching, teachers can also take advantage of the small number of students, small classroom space, and close distance between teachers and students to give full play to the influence of teachers' classroom behavior on students, which can more or less attract and promote students to listen to the class, thereby the effect of small class teaching is moderate, but in large class teaching, teachers may be powerless, even if they see the poor teaching effect, they have no better way to change it.

4.5 Summary: High efficiency of the topic-centered interactive small class teaching mode

Through classroom practice, it can be found that small class teaching, topic-centered, and interactive are three prominent and favorable factors to promote the teaching effect; while large class teaching, non-topic-centered, and non-interactive are the three factors that do not have an obvious beneficial impact on the improvement of teaching effect, but rather often played an unfavorable and negative role. Therefore, it can be said that in order to promote the teaching effect of general education courses of humanities, one should try to include in his teaching the above three favorable factors and avoid including the latter three unfavorable factors as far as possible.

The results of classroom practice show that the topic-centered interactive small class teaching mode has the best teaching effect and reaches excellent grades. Moreover, in small class teaching, as long as it is topic-centered or interactive, the teaching effect can be good; even if it is non-topic-centered and non-interactive, only small class teaching can achieve a moderate teaching effect. It can be seen that these three factors of topic-centered, interactive, and small class teaching do play a significant role in promoting the teaching effect.

In large class teaching, if it is topic-centered and interactive, the teaching effect can be good; if it is only either topic-centered or interactive, the teaching effect can reach a moderate grade; if neither topic-centered nor interactive, the teaching effect is the worst, which is a poor grade.

Summing up the results of classroom practice, it can be seen that the factors and their functions in promoting the teaching effect of general education courses of humanities are as follows: as long as one of the three factors of small class teaching, topic-centered, and interactive is included in the teaching of general education courses of humanities, the teaching effect is at least moderate; if any two of the three factors be applied in teaching, the teaching effect can be good; if the three factors are adopted in teaching at the same time, the teaching effect is the best and excellent (see Table 6 for details).

Table 6: Teaching Effect of Four Teaching Modes in Large and Small Class Teaching

No.	Teaching Mode	Class Size	Number of Class	Teaching Effect
1	Topic + Interactive	Small Class	9	Excellent
		Large Class	4	Good
2	Topic + Non-interactive	Small Class	5	Good
		Large Class	3	Moderate
3	Non-topic + Interactive	Small Class	4	Good

		Large Class	3	Moderate
4	Non-topic + Non-interactive	Small Class	5	Moderate
		Large Class	4	Poor

The above are the findings of the classroom teaching practice of the author of this paper in the past 9 semesters, among which the following point is the most significant: the practice results show that the teaching effect of the topic-centered interactive small class teaching is the best. This finding inspires us that to improve the teaching effect of the general education courses of humanities in research universities, the best way is to set up small classes as much as possible and strive to carry out topic-centered and interactive teaching in small classes.

5. Conclusion

5.1 Major findings

In the past 9 semesters, four teaching modes have been implemented in 14 large classes and 23 small classes of three general education courses of humanities. The results of practical exploration show that the topic-centered interactive small class teaching mode can achieve better teaching effects than other teaching modes. At the same time, the author of this paper surveyed the teaching of general education courses of humanities at the South China University of Technology and found that teachers with professor titles achieve a higher rate of listening to the lecture than teachers without professor titles; interactive teaching can make the class more active, so as to obtain better teaching effects; small class teaching, compared with large class teaching, has obvious advantages in promoting the teaching effect (Zhou, Yang&Hua, 2016). In other words, the interactive small-class teaching taught by professors can achieve the best teaching effect.

To sum up the findings of the teaching practice as well as the survey of the general education courses of humanities conducted by the author of this paper, the final conclusion can be drawn, that is, the topic-centered, interactive small-class teaching taught by professors is the best way to improve the teaching effect of general education courses of humanities in research universities.

5.2 Limitations and implications

The surveyed objects of this study are limited only to the students and general education courses of humanities of the South China University of Technology, and the teaching courses are limited to the general education courses of literature and culture taught by the author of this paper. Therefore, the findings of this practice exploration are more inspiring and useful for the general education courses of humanities of research universities.

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