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Reviewing the Comparisons and Analysis of Chinese and American Classroom Interactions

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ABSTRACT

This paper reviews the differences of classroom interactions between China and America. Effective classroom interactions play a nonnegligible role in teaching and learning processes, which can enable the class to be active and innovative. Scholars have also managed to classify different types of classroom interactions by their characteristics such as different roles played by teachers and students. However, categorizing the different modes in classroom interactions between two or more countries has not been researched widely and seriously. Therefore, this paper attempted to discuss the difference along with their advantages and disadvantages. By reviewing various relevant academic articles and analyzing class videos from China and America, it is found that on one hand, Chinese classroom interactions are plain and unitary, which is harmful to the development of the active and critical thinking for students, but it has a positive influence on the efficiency and the range of teaching process- these could result from the history and culture of collectivism and Confucianism as well as the educational conditions. On the other hand, American classroom interactions restrict their classroom efficiency and the utilization rate of resources but encourage students to think and work independently and creatively. This paper could provide future directions for teachers and educational policy and training stakeholders to absorb benefits from both sides and create better teaching and learning environment. Also, the findings of this paper are relatively general as a number of academic articles are used for references.

Keywords: classroom interactions, China, America, teacher discourse, students' uptakes

1. INTRODUCTION

Classroom interactions have been an important factor in education and this paper aims to compare and analyze the differences between Chinese and American classroom interactions. Classroom interactions discussed in this paper are based on the definition of the two-way exchange of teaching information between teachers and students in classroom teaching [1]. Moreover, the importance of classroom interactions has been pointed out by various scholars, mainly focusing on its role in enhancing the teaching effect and improving the teaching quality [1-3]. However, research on the comparison between different countries is limited, Yu asserts that classroom interactions in China and United States are completely different, leading us to the

topic of this paper which is to compare and analyze them [4]. In the following sections, Chinese and American classroom interactions along with their advantages and disadvantages will be discussed respectively and the conclusion will be made at the end.

2. ANALYSIS OF CHINESE CLASSROOM INTERACTION

Classroom interaction is an essential part of classroom teaching procedures. The communications between students and teachers play an important role in the development of students and the imparting of knowledge, which is the stage for teachers and students understand each other and test the results of teaching. Classroom interaction in China is different from that in

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Western countries: The interaction form in Chinese classrooms is mainly purely verbal interactions such as question-asking interaction. Yu argues that Chinese schools basically adopt instructive teaching for children's education, that is teachers will impart knowledge and lead the class [4]. This single interaction reflects China's typical cramming style of teaching. The traditional model of Chinese education is top-down and score-oriented cramming and instillation teaching, which is still the case in modern classroom teaching education [4]. If teachers just import knowledge into students in the Chinese classroom, students will not have much room for independent thinking, which is not conducive to cultivating the critical thinking of students. In China's one-sided instructional education model, students will not need to think about anything and the teacher will pass all the experience directly to students. This paper reckons that this kind of teaching mode will make students overdependence on their teachers and lack the ability to explore independently. Therefore, how does the way teachers interact in Chinese classrooms affect students?

2.1. The disadvantages of Chinese classroom interaction

2.1.1. Lack of critical thinking

Chinese students generally lack the ability of active thinking and critical thinking. Yu refers that the instructive indoctrination of knowledge and the unchallengeable stereotype of authority make students have the stereotype of thinking, which makes them tired of thinking and difficult to innovate [4]. This kind of teaching mode will make students overdependence on their teachers and lack the ability to explore independently. Below is another example from Cheng [5]:

Table 1. Independent Sample t Test for Critical Thinking Scale Scores

	n	М	SD	t	Р
Chinese Group	15	60.60	4.171	2.742	0.011
UK Group	15	64.40	3.376		

The survey included 30 postgraduate students from the same undergraduate university in China. 15 of whom were studying in the UK and the other 15 in China. The focus of the research is to compare with the critical thinking of a year of graduate studies. As a result, in the graduate school before participants with similar undergraduate academic experience. In accordance with the data above, the results of independent sample t-test of WGCTA (Watson Glaser Critical Thinking Appraisal) scores of two groups of graduate students are presented. The average scores of the Chinese and British groups are 60.60 and 64.40, respectively. This may be due to the more diverse classroom interaction models in the

UK classroom, such as seminars, simulation teaching, poster presentations. In addition, in the UK, teachers only impart knowledge for a short period of time, which only plays the role of guidance and assistance. The main body is students who have sufficient time and freedom to express themselves, and their views will also be valued by teachers. As shown in the table, the independent sample t-test shows that there is a significant difference in critical thinking ability between the two groups (t =2.742, P =0.011). Therefore, the data provided in the table is valid, and it can be concluded that the critical thinking ability of the British group is stronger than that of the Chinese group.

The reason why Chinese students lack critical thinking is attributed by some scholars to the fact that critical thinking is not suitable for Chinese culture, while others attribute it to the education system in which Chinese students live. Dam and Volman claim that critical thinking is part of the "western culture." Similarly, critical thinking is a "defining characteristic of western universities" [6]. From their point of view, it can be concluded that critical thinking is entirely a western product, and then exists only in the western cultural context [7]. At the same time, some scholars claim that the unsatisfactory performance of Chinese students' critical thinking is caused by the fact that Chinese culture is influenced by Confucianism, which does not advocate critical thinking. However, Panton argues that Critical thinking is not unique to Western culture, and Chinese culture is not the reason why Chinese students are deficient in critical thinking [8]. Therefore, the previous judgment in public that Chinese students lack critical thinking is biased. Geir argues that early Confucianism contains strong, extensive and from a Western perspective, even unique critical traits [9]. It is clear that critical thinking is not exclusive to Western culture, and Chinese students' lack of critical thinking is mainly due to their lack of proper guidance and training in school. However, the content and methods of school teaching are inevitably affected by China's entire cultural environment. In China's performance-oriented education system, it is unrealistic to achieve classroom interaction like that in Western countries. The purpose of China's classroom interaction model is to achieve good results in a college entrance examination.

2.1.2. The role of teachers in the Chinese classroom

Yu argues that in the process of frequent communication and interaction between China and the West, the differences in classroom interactions are becoming more and more prominent [4]. In the Chinese classroom interaction, the role of the teacher as a leader basically adopts instructive teaching, that is, the teacher imparts knowledge to students. Below is a video about a math class at a junior school, which can be searched in



the following reference [10]. In this video, from 24:55 to 25:09 minutes, the video shows the interactions between the teacher and students. The transcript is as follows:

Transcript 1:

01 TEA: [pinyin: Nawei, tongxue)(0.2) 01 [English translation: Who, can (0.2) 02 -->pinyin: huida yixia? 02 --> English translation: answer this question? 03 ((English translation: start interactions by 03 asking a question)) 04 TEA: [((English translation: blackboard writing))] 05 pinyin:(0.6) a? 05 English translation: (0.6) Anybody? 06 TEA: -->pinyin:(0.3)Fu yiwen? 06 --> English translation: (0.3) Yiwen Fu (a 06 student's name)? 07 ((English translation: lets the students join the 07 interaction by directly calling one's name))

In this video where interaction happens the teacher is imparting students the knowledge of rational number. In Transcript 1, the teacher wrote the rational number knowledge framework on the board. This written gesture on the board is related to Walsh's materials mode [11]. This teaching method is in line with China's instructive education, in which teachers impart knowledge, and the students listen to the lecture, forming a teacher-centered imparting mode from top to bottom.

In Transcript 1, we can see that the teacher interacted with the students by asking questions. Apparently, none of the students responded to the teacher, who called a student's name to answer the question after a 6-second silence. It is clear that in Chinese classrooms, teachers play a leading role, and the form of classroom interaction is relatively simple, only by teachers' asking questions. This is a common phenomenon in Chinese classrooms, where no one answers the teacher's questions. This might not because the teacher's questions are too difficult for the students to cause, but more because the students are afraid of making mistakes in public. Hence, students would rather say nothing than express their ideas. Different from Western culture, which emphasizes individualism, Chinese Confucianism emphasizes collectivism, which means most people are unwilling to reject or challenge the opinions of others.

2.2. The advantages of Chinese classroom interaction

2.2.1. Gain much knowledge

In China, the academic performance of students occupies most of their energy, while the cultivation of personal quality and comprehensive ability is often overlooked, and sometimes it is not even included in the assessment criteria. In general, the only standard of an excellent student in China is excellent grades. This performance-oriented teaching model pushes Chinese students to have a high requirement for knowledge mastery.

In the video from 25:20 to 25:27minutes, there is a clip of the interaction between the teacher and all the students [10]. The transcript is as followed:

Transcript 2

19 TEA: pinyin:suoyi ba ta fencheng shenme, 19 English translation: so what does it 19 break down into, 20 TEA: -->pinyin:zheng^(0.1)youlishu fu:,youlishu --> English translation: ^Positive(0.1) 20 20 rational numbers and minus:, 20 rational number 21 ((English translation: play the role as a 21 leader in the interactions)) 22 TEA: [((English translation: An emphatic 22 gesture)) 23 STS: pinyin:Zheng,youlishu he fu:::?youlishu] 23 English translation: Positive, rational 23 numbers and minus:::? rational number] 24 STS: pinyin:He ling_o = 24 English translation: And zero_o = 25 TEA: --> pinyin:=Ai^:: henhao? 25 --> English translation: =^Ai:: That's great? ((English translation: achieve transmission 26 26 of knowledge by interacting))

Lines 20 to 23 of the transcript show that in China, teachers mainly interact with the whole class. Therefore, the concept of performance-oriented education makes the Chinese teaching model more collectivist.

In China, the class size is large (32 students) and the curriculum density is high. The most important thing is that it is only oriented to quickly master the exam



requirements. This has a mutually complementary and causal relationship with teacher-led classroom practice. The external conditions of Chinese classroom teaching have strengthened teachers' leadership in the classroom so that teachers must achieve their teaching goals by enhancing the speed of knowledge transfer in the classroom. Relying on the guidance of teachers in this kind of learning environment can promote the rapid sharing and exchange of knowledge and disseminate basic knowledge efficiently and widely in the classroom. At the same time, this teacher-led classroom also strengthens the continuous development of large-class teaching and high-density courses, so that more students can benefit from obtaining higher test scores, and it has a certain effect on narrowing the gap between top schools and ordinary schools. Therefore, the largest advantage of Chinese classroom interactions is that this teaching model also allows teachers to effectively transfer knowledge and save time. The interaction of Chinese teachers not only expands the scope of knowledge output but also improves the efficiency of knowledge input.

3. AMERICAN CLASSROOM INTERACTION ANALYSIS

Due to various reasons such as different national conditions and educational systems, the educational interaction mode of American classroom is different from that of traditional Chinese classroom in many ways. The American classroom pays more attention to the students' active participation in classroom communication and enables the students to acquire the ability of classroom communication through activities. Walsh defined a notion of "Classroom Interactional Competence (CIC)", which mainly refers to teachers' and students' active participation in classroom communications [12]. CIC is a bridge for students to finally acquire the communicative ability of the target language. Emphasized the importance of classroom communicative purpose will also cause the students to obtain CIC. If the students lack the necessary CIC, they will avoid participating in classroom communications. After they graduate from school and enter into the society, they can transfer this interactive competence from a small classroom to a big social environment.

In our views, compared with the limitations of Chinese classrooms, the educational interaction model of American classrooms can better enable students to integrate into the classroom and explore independently. However, the educational interaction model of western classrooms still has its own advantages and disadvantages.

3.1. The Advantages of American Classroom Interactions

3.1.1. Interactions with affinity

Myers argues that how teachers use affinity seeking strategies and students' perceptions of classroom atmosphere is demonstrated by students' perceptions of teacher affinity seeking and classroom atmosphere [13]. In Myers's paper, an experiment was conducted on 147 undergraduates at a large mid-western university. It can be concluded from the experimental results that there is a significant relationship between students' perception of classroom atmosphere and teachers' use of affinity seeking strategies [13]. Richmond argues that the negative effects of teachers may have on students' motivation when they use power to control their ordinary behavior in the classroom are often tested by the immediacy of teachers and the use of teachers' affinity seeking techniques [14].

From these, we can see that the interaction mode of American classroom not only has a higher CIC of teachers' students, but also more in line with the theory of seeking affinity in class.

3.1.2. Students' Creative Spirits and Critical Thinking

The educational interaction model in American classrooms encourages students to communicate with teachers actively, show their ideas to classmates and teachers boldly, dare to put forward new ideas, and dare to question the authority of teachers. Calvert proposes a way to encourage children's thinking by using theory and practice to guide parents and teachers in seeking respectful and creative approaches [15]. This kind of classroom interaction not only enables students to have the spirit of innovation, but also helps students to think critically. Calvert argues that lifestyles and the global order are changing very rapidly due to the development of science and technology. Some people are ready and able to face these changes, while others are not [15]. Therefore, in order to cope with these changes, the ability to solve problems is necessary. To be able to solve problems well, students need to have the ability of critical thinking.

3.1.3. Students' Ability to Solve Problems Independently

In the cognitive structure learning theory advocated by Bruner, discovery learning is the best way to learn knowledge. It aims at cultivating students' inquirybased thinking methods, and students use the conditions provided by teachers to think independently [16]. This is exactly what the American teachers did, they acted as guides to guide students to independently understand



and summarize by their efforts. The following transcript will show this characteristic of the American classroom through another video from a middle school math class [17]:

Transcript 3

01 TEA: Okay, tell me tell me a starting point. 02 -->where cou^ld u start. -->Do you ha^ve to start at nine point right 03 01 four? 04 ((also start interactions by asking a 04question)) 05 ST1: -->Start at nine point eight (0.4) 06 ((students join the interaction more freely 06 without being named)) TEA: -->okay. You could start at nine point eight, 07 07 (0.5) and you got to go to what. 08 ((continue the interactions by affirming 08 students and providing advice)) 09 ST2: eleven point two? 10 TEA: -->eleven point two so-= 11 ((play the role as a promoter in the 11 interactions)) 12 ST2: =Or yeah eleven point two 13 ST3: Ye we can do it Lets go by, lets go by point twos-14 ST2: 15 TEA: -->=Okay [perfect so] as long as 15 you consistent, 16 [((nod))] 17 -->(0.2) as long as you la^bel, 18 -->there's not really a right or a wrong. 19 ((achieve exploration of learning methods 19 by interactions))

4. CONCLUSION

We have demonstrated the pros and cons of Chinese and American classroom interactions by examining various articles and different videos. It is analyzed that the lack of diversity in Chinese classroom interaction forms is not conducive to the explorative spirit and the cultivation of critical thinking. However, this instillation teaching method has a positive impact on the efficiency and scope of knowledge transmission. And on the other side, the interactive mode of American classroom is

very approachable. It aims at cultivating students' critical thinking, innovative spirit and ability to solve problems independently, and encouraging students to explore new findings. However, this kind of classroom interaction mode has low resource utilization rate for teachers, and the classroom efficiency is less efficient. The cultural and historical reasons behind these differences are mentioned in the above sections such as collectivism and individualism. Chinese Confucianism. different national conditions and educational systems. They all play their roles in shaping what we have discussed. Further research about the patterns behind different classroom interactions (e.g., questioning) and better implementation should be carried out, so that it can provide new perspectives on researching this area. Summing up the findings and achievements of this article can inspire education policy and training stakeholders to better absorb the views of both Chinese and American education modes, so as to make classroom interaction more successful in the teaching processes, leading to a result that students are better educated, more competitive and creative, and thus making more contributions to educational developments.

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