Research on teacher student verbal interaction in classroom based on iFIAS -- Taking three high quality Chinese classes in Lhasa junior high school as an example

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Abstract: verbal interaction is the most effective way of interaction between teachers and students in the classroom. The improved Flanders interaction analysis system (iFIAS), which is suitable for the Chinese discipline, is used to effectively analyze the verbal interaction between teachers and students in classroom teaching. This study selects three high-quality Chinese classes in Lhasa junior high school. The results show that: the Chinese class in junior high school has the characteristics of harmonious classroom atmosphere, diversified learning methods and good cultural value; There are also some shortcomings, such as teachers' classroom questioning is mainly closed questions, students' awareness of active questioning is weak, and teachers' and students' multimedia classroom use is single. Therefore, teachers need to pay attention to classroom questioning, students should enhance the awareness of active questioning, and teachers and students should further develop the function of multimedia classroom.

Key words: iFIAS ; Verbal interaction; Junior high school Chinese; Quality Course

1 Research background

Classroom is the most direct place of teaching, and the quality of classroom teaching determines the quality of education. The outline of basic education curriculum reform (Trial) in China clearly points out that "teachers should actively interact and develop with students in the teaching process". In addition, the compulsory education Chinese curriculum standard also emphasizes the need to strengthen the interaction between teachers and students in the classroom. Nowadays, with the continuous implementation of the new curriculum reform, Chinese teachers are increasingly aware of the importance of classroom interaction for teaching.

Existing studies on primary school Chinese classroom have found that there are unfair phenomena in the classroom, and the concept of classroom interaction should be changed in time. In the high-quality Chinese classroom, teachers and students have good emotions, interactive democracy, teachers' questions focus on enlightening students, and there is good classroom teacher-student interaction. High quality courses not only reflect the good interaction between teachers and students, but also have a demonstration and leading role for Chinese teachers' teaching. High quality courses have the teaching characteristics of the times and regions, reflecting the practice and implementation of the concept of curriculum reform. Especially in junior high school Chinese classroom, the role of speech plays an important role in promoting the whole class. At the same time, verbal interaction is not only the main means of classroom teaching, but also can be clearly expressed and objectively recorded. Therefore, this study uses the improved Flanders interaction analysis system (hereinafter referred to as iFIAS), selects three high-quality Chinese courses in Lhasa junior high school for analysis, examines the teacher-student verbal interaction in Chinese classroom teaching under the background of the new curriculum in China, and gives relevant suggestions.

2 Research implementation

2.1 sample selection

This study selected three high-quality junior high school Chinese courses in Lhasa in the "one teacher one excellent course" of the national basic education resources public service platform as the research object. All the high-quality courses are municipal excellent courses, representing a high level of classroom teaching, which has the function of reference and demonstration. The specific basic information of the class is C1: "Song of Climbing the Youzhou Terrace"; C2: "Thatched Houses Broken by the Autumn Wind"; C3: "Tour of Shanxi Village".

2.2 research tools

This paper uses the Flanders interactive analysis system (iFIAS) improved by Chinese scholar Fang Haiguang and others, which not only retains some of Flanders' traditional analysis functions, but also can adapt to the teaching in the information age. In order to make iFIAS more applicable to the discipline of Chinese and improve it, first, through the overall perception of high-quality courses, it was found that there was no "chaos that was not conducive to teaching" in the classroom, so the code "11" was deleted. In addition, reading aloud is an essential link in the Chinese classroom. The "code 11" is defined as "reading aloud". The specific coding of iFIAS applicable to the Chinese discipline is shown in Table 1.

Table 1 improved Flanders interactive analysis system for Chinese subject

Classification			Coding	Formulation		
Teacher talk	Indirect impact		1	Accept emotions		
			2	Praise and encouragement		
			3	Adopt student perspectives		
			4	Teacher questions	4.1	Ask open questions
					4.2	Ask closed questions
	Direct influence		5	Teaching content		
			6	Give orders		
			7	Criticize students or maintain authority		
Student language			8	Students' passive response		
			9	Students speak actively	9.1	Students' active response
					9.2	Students take the initiative to ask questions
			10	Discussion and cooperation between students and peers		
			11	Read in unison, silently, read in different roles, etc		
Silence			12	Students' completion of exercises, classroom notes, etc. contribute to the silence of teaching		
Technology			13	Teachers' use of Technology		
			14	Students' use of Technology		

2.3 data processing and analysis

The iFIAS coding assistant was used to encode the data and finally form the classroom observation record table. iFIAS analysis program automatically generates interaction analysis table and interaction analysis matrix.

3 Characteristics of classroom interaction of high quality Chinese course in junior high school

Table 2 characteristics of teacher-student verbal interaction

Dimension	Class number	C1	C2	C3
Course interaction structure	Teacher speech	55%	53%	50%
	Student speech	35%	42%	37%
	Effective silence	8%	2%	3%
	technology	5%	2%	9%
Classroom teaching style	Indirect and direct impact ratio	0.76	0.44	0.45
	Positive and negative reinforcement ratio	1.10	0.80	0.67
Classroom emotional atmosphere	Positive integration qualified (1-3 rows and 1-3 columns constitute the area)	22	13	11
	Defect grid (area composed of 7-8 rows and 6-7 columns)	3	8	10
	Frequency ratio of the two	7.33	1.63	1.1
	Steady state lattice ordered pair (diagonal region)	(5,5)	(5,5)	(5,5)

Student speech act	Active speaking ratio	44%	26%	17%
	Passive response ratio	27%	19%	28%
	Peer discussion ratio	14%	38%	18%
	Reading ratio	25%	16%	37%
Teacher questioning mode	Proportion of questioning in Teachers' speech	29%	15%	17%
	Proportion of open questions in questions	52%	23%	26%
	Proportion of closed questions in questions	48%	77%	74%

3.1 analysis of classroom interaction structure

The proportion of teacher's speech, student's speech, effective silence and technology reflects the overall situation of a class's behavior composition. According to the Berek norm, the teacher's speech norm is 68% and the student's speech norm is 20%. When the proportion of teachers' or students' speech acts is higher than the norm, it means that teachers' or students' speech acts are more and they have the right to speak in the classroom.

According to table 2, the proportion of teachers' speech in the three high-quality classes is lower than the norm, and the proportion of students' speech is higher than the norm, indicating that teachers can control the classroom in the classroom, but will not deprive the classroom discourse power too much. Students can respond positively, and the classroom structure tends to be dominated by teachers and students. The proportion of silence is lower than 11% of Berek's norm. Students actively follow the teacher's teaching ideas in class, and there are less ineffective languages, but it also shows that students lack time for in-depth thinking. The proportion of classroom technology is 5%, 2% and 9% respectively, and the proportion is small. Further analysis of video shows that in the classroom, students do not use multimedia for operation, and teachers only use PPT to play and switch courseware, and the integration of teaching and information technology remains superficial.

3.2 analysis of classroom teaching style

It can be seen from table 2 that the ratio of indirect influence and direct influence of teachers' language in the three high-quality classes is 0.76, 0.44 and 0.45 respectively, and the ratio is less than 1. It shows that teachers directly guide students to carry out classroom activities in the classroom. The teaching style tends to control the classroom directly. In terms of positive reinforcement and negative reinforcement, the ratio of C2 to C3 is 0.80 and 0.67 respectively, indicating that positive reinforcement is less than negative reinforcement in these two classes. Teachers' positive reinforcement to students is slightly weak, and most of them adopt students' opinions directly. The ratio of positive reinforcement to negative reinforcement in C1 is 1.10>1, which shows that teachers tend to take positive reinforcement and actively guide students to organize classroom teaching in the teaching process.

3.3 analysis of emotional characteristics of teachers and students

The emotional atmosphere of teachers and students includes the stable emotional experience formed in teaching activities, the attitude towards teaching activities and the comprehensive reflection of corresponding behaviors. A good classroom atmosphere helps to improve teachers' classroom self-confidence, promote students' active learning, and form a good interaction between teachers and students. The larger the positive data, the more harmonious the emotional atmosphere between teachers and students. The larger the defect lattice data, the worse the communication between teachers and students. The steady-state lattice indicates the proportion of behavior variables of teachers and students lasting more than 3 seconds in the total teaching time. The frequency distribution of positive case, defective case and steady-state case reflects the emotion of teachers and students. In the three high-quality courses, the proportion of positive integration of qualified and defective cases is greater than 1, indicating that the emotional communication between teachers and students in the classroom is harmonious, and the relationship between teachers and students is harmonious. According to the data in Table 2, the order pairs (5, 5) in the steady-state lattice have the most intensive distribution of "teacher lectures", with frequencies of 140143137 respectively. It shows that the teacher takes the words and sentences in ancient poetry as the main task. In summary, we can see that the emotional characteristics of teachers and students are good.

3.4 analysis of students' speech acts

Students' speech acts include four parts: active speaking, passive response, and peer discussion and reading. Active speaking reflects the process of students' active thinking and free expression in the classroom, which is conducive to the development of students' thinking.

It can be seen from table 3 that in C1 and C2, the proportion of students' active speech is higher than that of passive response, and the

proportion of active speech is 44% and 26% respectively, indicating that students in the classroom respond actively. In C3, the proportion of passive response (28%) was slightly higher than that of active speaking (17%). The active speaking part includes active response and active questioning. Further analysis of the video shows that the proportion of students' active questioning in the three classes is 0, and students' problem awareness still needs to be strengthened in the classroom. The proportion of peer discussion is about 14% to 38%, indicating that there is a form of cooperative learning in the classroom. Cooperative learning can narrow the differences between individuals, deepen students' understanding and mastery of knowledge, and enhance their sense of self-decision-making. The proportion of reading aloud is between 16% and 37%, which indicates that teachers should reasonably guide students to read aloud.

3.5 analysis of teachers' classroom questioning mode

The proportion of teachers' verbal questions in C1 classroom is higher than that in C2 and C3, in which the proportion of open questions in C2 is 23%, and the proportion of closed questions is 77%, indicating that teachers' questions in this classroom are mostly basic questions, that is, training questions. Teachers drive students to answer, aiming to consolidate students' basic knowledge, but fail to promote the further development of students' thinking. In C1 classroom, the proportion of teachers' asking open questions was 52% and 48% respectively, indicating that teachers in this classroom pay attention to improving students' creative thinking.

4 Interactive characteristics of high quality Chinese teaching in Lhasa junior high school

4.1 harmonious classroom atmosphere

In the above three classes, teachers actively guide students, and students can actively cooperate with teachers to answer questions, so as to promote orderly classroom activities. In terms of language, teachers and students have a proper proportion of language in the classroom. Teachers treat students with encouraging language, actively strengthen students' behavior, stimulate students' enthusiasm and initiative, create a good classroom atmosphere for students, and build the classroom into a harmonious, relaxed and democratic classroom.

4.2 diversification of learning methods

Different learning methods in the classroom give students different experiences, and can stimulate students' sense of cooperation and creativity. The three cases reflect the students' ways of learning Chinese, such as cooperative learning, active thinking and active exploration. Teachers organize students to adopt different learning methods in the classroom, optimize classroom teaching and promote students' learning.

4.3 the cultural value of Chinese is good

Chinese is a subject combining humanity and practicality. Only when knowledge is applied in practice and promotes students' development can its real value be reflected. The new curriculum emphasizes the combination of Chinese culture and curriculum knowledge. C1 and C2 both mentioned Lhasa's unique humanistic knowledge in teaching, which helps guide students to combine textbooks with practice and improve their knowledge literacy.

5 Research prospects

First of all, teachers should pay attention to classroom questioning. Teachers need to appropriately create open problem situations, while closed problems account for a large proportion in C3, aiming to consolidate students' knowledge. Teachers should integrate existing knowledge, change the dominant position of the classroom, and pay attention to guiding students' exploration spirit. At the same time, pay attention to the gradient and coherence of classroom questioning, so as to stimulate students' learning motivation. Secondly, students should enhance the awareness of active questioning. Students in the classroom mainly answer questions passively, and their awareness of asking questions actively is weak. Students should also strengthen the awareness of interaction and give full play to cognitive interaction. On this basis, teachers and students can achieve in-depth interaction and construct high-quality classroom. Finally, teachers and students should further develop the function of multimedia classroom. In the classroom, teachers' application of multimedia technology is mainly to show the basic operations such as courseware, and the multimedia and other equipment are not fully used to promote the development of students. Teachers and students can further create a smart classroom with diverse interactive behaviors, and further promote the quality of classroom interaction with information age technology.

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