# **Research Topic:**

# Pre-service teachers' practices of asking questions in Chinese history classes: Patterns and difficulties

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#### <u>Abstract</u>

This study aimed to analyze how Chinese History pre-service teachers' practices of asking questions during practicum. To be specific, this study explored a) types of teachers' questioning and feedback; b) patterns of questioning analyzed by the model of IRF (initiation response feedback); c) the difficulties in asking questions to promote classroom interaction. Three pre-service Chinese teachers were observed in nine classes (three classes/per teacher) and individual interviewed. Content analysis method was used to analyze the collected data. The findings show that display questions and indirect feedback were majorly adopted and IRF mode were usually used in the classroom when pre-service teachers questioning students. Also, from the interview, three participants reported that they were confronted with the difficulties in asking questions to promote class interactions such as time constraints, students' silence, quality of feedback used. The findings of the study have implications for cultivating pre-service teachers' questioning and feedback skills.

#### Part 1: Introduction

The traditional teacher-centered teaching model often leads to overly quiet classes, in which teachers are only responsible for transmitting knowledge and students just passively accept it, with little interaction between both. Such classes are claimed to cause low learning efficiency and a decline in students' interest in learning (Lockemy & Summers, 1993). Schmitt (2008) pointed out that in modern education, classroom



interaction has proved to be very important, which can not only increase students' concentration in class but also improve classroom efficiency and students' interest in learning. Questioning is the most common way teachers use in class to enhance class interaction. Giving appropriate and effective feedback to students' answers after questioning can often encourage students to participate more in class, thus facilitating more classroom interaction.

Chinese history is often considered a boring subject. In recent years, the Hong Kong Education Bureau tired hard to revise the Chinese History curriculum more in line with the current education needs, hoping to give teachers a clear guideless. According to the Chinese History Curriculum Guide (Secondary 1-3) (Hong Kong Curriculum Development Council, 2019), the Chinese History teachers should fulfill the following requirements:

- Teachers should establish a harmonious and open classroom learning atmosphere, effectively set up questions, inspire students to think, promote the atmosphere of interaction in the classroom, so as to stimulate students' learning motivation
- Clearly understand the circular relationship between learning, teaching and evaluation, change the exam-oriented teaching concept, make good use of evaluation, timely feedback, and promote learning and teaching.
- Teachers should adopt inquiry-based learning mode to explore questions, let students participate in exploration and discussion, and use their thinking power to learn history, so as to help students achieve "learning" and "independent learning".



Obviously, in recent years the HKEDB put more emphasis on student-centered classes and hoped that the teachers can raise up qualified questions and give immediate feedback to students thus enhancing classroom interaction. Therefore, whether teachers apply the Q&A session successfully to the classroom is really important and directly decide whether they can achieve this goal. In literature, most research focused on questioning practices in language classes. Limited studies have been conducted in the context of Chinese history teaching.

However, during the previous studies, it is found that although in most Hong Kong universities, pre-service teachers are required to take pedagogical course like curriculum and assessment to learn how to organize effective questioning and feedback, there is always a gap between the theory and the practice. It is interesting to analyze pre-service teachers' questioning practices to identify their patterns and encountered difficulties. This would shed light on how teacher educators enable pre-service teachers prepare for using questioning to promote classroom interaction.

In order to respond to the above research concerns, pre-service Chinese History teachers were invited to participate in this study to explore their questioning practices during practicum. Also, nine classes were observed to find the pattern and difficulties when the pre-service teacher used Q&A session in the classrooms.



#### Part 2: Literature Review

2.1 Theoretical framework of Initial-Response-Feedback (IRF)

Lemke (1990) mentioned a "triadic dialogue" which is the original model of IRF mode. In this three-stage exchange structure, three typical moves are included: Initiation (often via a teacher question), Response (students' answers) and Feedback also called Follow-up (often provided by teacher) (Sinclair & Coulthard, 1975). The following is the example of IRF mode:

Teacher (I): Where is the capital of China?

Student (R): Beijing

Teacher (F): Yes, Beijing is the capital of China. Well done!

Many previous studies such as Hong (2009) and Cohen (2011) revealed that IRF mode can build active classroom interaction between teacher and students and complete the education goals. Wells and other researchers found that using the IRF mode in the classroom may lead to two different functions. (Nassaji & Wells, 2000; Wells & Arauz, 2006). The first function is serving like knowledge transmission which is characterized by the assumption of a coincidence between the speakers' meaning and the listeners' interpretation, and it is observable. For instance, in the classroom, when teachers use IRF mode and in the third move (Feedback), their evaluation or comments on students' answer are not on the basis of what students actually responded, but what the teachers expects as feedback when formulating the questions. In contrast, the second function is



more active since both teacher and student are participate in an interaction. For example, a discussion between the teacher and the students to explore new knowledge which increases students' intellectual curiosity, innovation, and exploration ability.

Because of the differences between the two functions, whether IRF mode can help students achieve the learning requirements and bring benefit to develop good learning methods has long been controversial. Some researchers like Chin (2006) pointed out that in the process of IRF, the triadic dialogue is teacher-framed which has restrictive effects on students' thinking. Similarly, researchers like Tharp & Gallimore (1991) made the same perspective, they argued that IRF mode was considered as a monologic recitation script which gave few chances for the students to tell their ideas or thoughts. Other researches have opposite attitudes toward to use IRF mode in the classroom, in a social-cultural research, Mercer (2010) found that the triadic pattern (like IRF mode) that governs the teachers and students allowing the teachers to fulfill their role and guarantee the necessary control over the interaction since the first move (Initial) of IRF mode is raised by teachers, so do the ending feedback, which gives the teachers opportunities to control the direction of the dialogue. To do so, teachers can complete a built-in repair structure in the last turn of IRF mode and correct students' wrong answers, which fulfill teachers' responsibility as ensuring the students appropriate the knowledge, which is normative within a particular culture, like the one in Hong Kong traditional education (Newman, Griffin & Cole, 1989). In addition, researchers like Walsh (2011) also pointed out that using IRF enables teachers to have better classroom management



because they can control who may speak and when, for how long, and on what topic. For the short 30–40-minute class, IRF can ensure that teachers can achieve maximum classroom interaction within a limited time. Other researchers like Walsh (2011) and Nikula (2007) argued that in many examples of IRF, teachers' talk is maximized compared to students' talk since in the process of IRF, teachers usually make two steps (I, F) and students only make one step (R). This tendency of the teacher to control and initiate communication results in a mechanical, even monotonous, response from the students. Learners have little space to develop their ideas and engage in extended forms of talk when under a tightly structured IRF system. Campuzano (2018) pointed out that teachers should transfer this power to the students so that they can initiate interactions, which can avoid improper use of the IRF system that may result in reduced classroom interaction.

The process of the IRF mode include two significant parts: questioning and feedback. Questioning is a critical element in facilitating students' learning (Macalister, 2011). Through the step of questioning, students' learning achievement in the class can be assessed and the classroom interaction can be improved. On the other hand, Alexander (2008) pointed out that the effectiveness of instructional support such as feedback is an important aspect of the quality of teacher-child interactions in a classroom. It has been proved that feedback has a great effect on students' learning, especially feedback that only uses comments. Therefore, the following introduced classification of questioning and feedback types.



#### 2.2 Teacher Questioning

According to Anderson & Knathal (2001), quality questions that questioned by teachers can increase students' participation and curiosity in the classroom. Other researchers like Menyani & Merabti (2020) gave the same perspective that a good question can provide students with opportunities to express their thought and boost their level of participation, which increases more classroom interaction. Besides, teachers' questioning has many other functions including focusing attention, exerting disciplinary control and the most significant one is to encourage students to participate in the class (Farahian & Rezee, 2012). Other researchers like Cullen (1998) also stated that different types of questioning always have a significant effect on the quantity and quality of students' class interaction. Thus, as pre-service teachers, it is necessary to learn the importance of using quality questions in the process of Q&A session.

There are two types of teachers questioning which are often used in Q&A session: display question and referential question Campuzano (2018). The former one is those whose answers is known by the questioner, and the latter one is those whose answers are unknown to the questioner. In contrast, referential question is less common than display question and it usually gets more complex and long answers from the students which results in more genuine communication (Llinares, et al., 2005). Examples of two types of questioning in Q&A session are shown below:



#### A) Display Question

Teacher: What is the capital of Ecuador? So, now let's open our books. (I) Student: The answer is on page 21? Quito is the capital of Ecuador. (R) Teacher: That's right. The capital of Ecuador is Quito. (F)

#### B) Referential Question

Teacher: Why do you prefer drinking water to juice? (I)

Student: Well, compared to some processed juices, water does not have sugar and other artificial flavors. Also, it has fiber which helps my digestion. And actually, when I drink water, and I do not feel thirsty anymore. This does not happen when I drink juice. (R) Teacher: I see, that's a good explanation. (F)

The purpose of display and referential question are different, the former one puts emphasis on eliciting learnt knowledge and the second one focuses on seek further and deeper information (Richards & Schmidt, 2010). It seems that referential question gives students more chances to develop ability of further analysis and give teachers opportunity to have deep evaluation, while display question is only used to recall the knowledge that was taught by teachers before. Display question and referential question are often mixed in classroom teaching since an inquiry-based whole-class teaching usually starts with asking some simple questions to make some hypotheses, and then followed by further investigation, and with an end of conclusion or evaluation from teachers (Bell et al., 2010). However, whether these two kinds of teacher questioning



are useful and make efficient classroom interaction are argued by many researchers and a lot of conflicting findings are shown in the previous studies (Wright, 2016). Some researchers (Hong, 2006; Mc Neil, 2012; Brock, 1986) pointed out that referential question can receive extended interaction in the classroom, which enhance students output and learning efficiency. While others hold opposite views, some researchers argued that referential question is only useful for a small group of students in the classroom, there is no prove documentary evidence can prove that it necessarily elicits significantly more students to join the classroom interaction, but display question promotes more classroom interaction and become the central resource due to the high frequency of usage by teachers (Lee, 2006; Yang, 2010; Tsui, 2001). Although referential question may not guarantee all the students in the classroom increase their responses in the classroom interaction, students' ability of learning and acquiring of knowledge may be aided when answering the referential questions that raised by teachers (Long & Sato, 1983) since using teacher questioning as a scaffolding tool can help the students make more meaningful and deep-thinking answers (Mc Neil, 2012).

#### 2.3 Teacher Feedback

Compared to the teacher questioning, teachers' follow-up feedback right after students' responses plays a much more important role. Many studies have done to reflect students' view in the process of correction error and the results showed that students generally felt that receiving feedback is helpful and they are willing to get the



feedback from the teachers, which is extremely important to their progress (Cohen, 1987; Radecki & Swale, 1988). Researchers like Kiemer et al. (2015) mentioned that constructive feedback is critical in encouraging class participation and is positively associated with students' autonomy, competence, and learning motivation. Also, Smith & Higgins (2006) pointed out that the quality teacher feedback in Q&A can facilitates interactive learning in the classroom.

Direct feedback and indirect feedback are the two most common seem types that has high frequency of usage by teachers in the classroom. According to Eslami (2014), indirect feedback refers to the feedback that does not provide students a way of correcting answers, teacher will only indicate students that where is wrong but leave the students themselves to correct or use some hints to guide students find the correct responses, while direct feedback will not only tell the students where the mistakes are but also provide them with the way of correction. Examples of two types of feedback are shown below:

Teacher: Which city is the capital of China? Students: Shanghai.

Teacher: No, Beijing is the capital.

B) Indirect Feedback

A) Direct Feedback

Teacher: Why did the Qin Dynasty fall?



Students: Because it ran out of money?

Teacher: Not exactly. The laws of the Qin Dynasty were very strict, and the people were taxed a lot. Based on these two points, do you think it has anything to do with its demise? Students: Under such circumstances, the people could not bear the government any longer, so they began to protest and overthrew the Qin Dynasty.

Teacher: Yes, well done.

Students showed mixed responses to those two types of feedback. Ferris (2003) proved that some students preferred indirect feedback, but in Lee's (2008) study, it showed an opposite result. Lee (2008) found that high school students in Hong Kong are more preferring to receive direct feedback from their teachers because with the direct feedback they can easily identified the mistakes and there is minimal space for discussion of errors. However, compared to the indirect feedback, although direct feedback gives correction on all errors, but it always makes students feel overwhelmed and reduced their motivation, which may decline their willingness of participating classroom interaction (Frodesen, 2001).

From the previous studies, it seems that indirect feedback brings more long-term benefit to students' learning and helps to develop their ability of deep thinking and analyzing, which also enhance their memory of the knowledge. However, it may reduce students' learning motivation and decline them participate in the classroom interaction. Although direct question is commonly used in the classroom but whether it can improve



classroom interaction still remained to be discussed. Thus, so far there is no firm conclusion that which types of feedback can enhance classroom interaction.

### 2.4 Studies on pre-service teachers' questioning practices

Many pre-service teachers found it is not easy to facilitate classroom discussion and motivate the students to join the classroom interaction. Some researchers pointed out that pre-service teachers are always lack of experience, and most of them rely on the prior experience which gain from their teachers, which may cause them to recede to the teacher-centered approach to talk inadvertently (Mansour, 2009; Henning et al., 2014). Before field experiences, pre-service teachers often get sufficient chances to observe the in-service teachers' instruction and teach students. However, some inservice teachers use oligarchic teaching method, which is more likely a lecture that only include teachers' speech. Based on that situation, Lee & Kim (2016) argued that preservice students have rare opportunities to analyze in-service teachers' skills of class talk, questioning and giving feedback, which does not help the pre-service teachers to learn from the observation to make up for the lack of experiences of asking questions in the classroom to enhance classroom interaction. Some studies have shown the similar results that comparing to the in-service teachers, pre-service teachers put more emphasis on classroom management instead of facilitating students' learning or teaching methods (Leatham & Peterson, 2010; Peterson & William, 2008). Therefore, it is rare for the pre-service teachers to use the Q&A session in the classroom properly



since they have few experiences and can imitate few in-service teachers, and pre-service teachers themselves are not so care about using the Q&A session and the classroom interaction.

On the other hands, Edwards-Groves & Hoare (2012) pointed out that even some pre-service teachers realize the importance of using Q&A session in the classroom or the significate of classroom interaction, many of them just perform based on the known or experienced patterns of classroom interaction, which is learnt from their own education, but ignore the students' responses and just focus on whether completing the process of Q&A session. Teachers mechanically ask the questions in a planned way and do not corresponding response to the students' answers. In this case, teachers will mechanically use the Q&A session, which will not help students' learning and make efficient classroom interaction.

In the study of Kachur & Prendergast (1997), it is found that classroom culture would influent students' performance. For example, if the classroom used to use teacher-centered mode, then students can hardly make some response if the new teacher changed the classroom into student-centered mode. Besides, teacher's attitude is also very important. In the Kachur & Prendergast study (1997), it also found that teachers who take students seriously motivate students' engagement, but if teachers override some types of teaching questioning may decline the numbers of dialogue. Thus, factors like class culture and teachers' attitudes of applying questioning to the classroom are



very important and directly make influence on the students' engagement.

Besides, according to Dong et al. (2015) many teachers found that it is full of challenges in giving students some quality follow-up feedback in limited class time, especially for the referential questions, which will prevent them from achieving their teaching goals. Teachers need to find out what is the most suitable or proper response to make the comment of students' answers since there are no set answers. Also, in Yang's study (2011), she found that many students complaint that it took them a long time to figure out the correct answers when they received indirect feedback from the teachers, mainly due to the reason that they cannot understand what exactly the teacher wants. Although indirect feedback is good to arouse students' ability of thinking independently and correcting the error by themselves, it wastes too much time in the limited class time. Therefore, unproper indirect teacher feedback with guideless hints will be useless, students cannot use it to make efficient correction and may easily lose the passion in joining classroom interaction.

To sum up, in the previous studies, researchers found that pre-service teachers are lack practical experience of asking questions to enhance classroom interaction since they have little chance to learn from the in-service teachers. When they ask question and give feedback, pre-service teachers encountered many problems such as unclear indirect feedback or limited time in the classroom, and sometimes they mechanically asked the planned questions but ignored the students' response and give them non-



corresponding feedback or follow-up questions, which reduces the students' classroom interaction. Thus, how to make efficient classroom interaction through questioning is something those pre-service teachers need to think.

#### Part 3: Research Design

3.1 Research objectives and research questions

Some research gaps have been shown. Firstly, many researchers explored teachers' questioning practices in second language learning class such as Teaching Chinese as second language or Teaching English as second language, few studies are based on Chinese history classes in Hong Kong public schools. Secondly, many researchers have not done sophisticated analysis of how different types of questions and feedback that used in Q&A sessions which affect the classroom interaction. Thirdly, few studies were related to the group of pre-service teachers and analyzed their questioning practices during practicum. Thus, this paper is aimed to bridge those gaps by addressing three research questions as shown in below:

(a) What types of questions and feedback are used by pre-service Chinese history teachers in classrooms?

(b) What patterns do pre-service Chinese History teachers follow in their Q&A sessions?(c) What difficulties do Chinese pre-service teacher encounter in questioning practice to promote class interaction?



#### 3.2 Research Setting

This research is carried out in three local secondary schools in Hong Kong. Three schools are in the same band and the numbers of Chinese History classes are the same, 3 classes in each week. All classes last for the same minutes, around 40 minutes. In this research, all classes are Form Three classes with the similar class size, around 30-40 students, and the textbooks that used in the classes are the same. In the research, each pre-service teachers were observed for three times for the same classes (totally nine classes) to help with the data analysis. After the six weeks internship, three pre-service Chinese History teachers were interviewed individually for more data collecting.

#### 3.3 Participants

Three Chinese History pre-service teachers who accepted the same training education classes in the Education University of Hong Kong will be invited by email to participate in this proposed study. All the participation in the study is voluntary. Participants need to finish six-week internship in secondary school as pre-service Chinese History teachers who teach Form Three classes independently. All three participants are all final year students, and it is their first to experience the face-to-face teaching internship.



3.4 Data collection

The process of the data collection began after the permission of the ethical review and an official approval was obtained from Human Research Ethics Committee of EdUHK in December 2021. All the data in this research was collected through the classroom observation and individual Semi-structured interviews.

Based on the three research questions, two qualitative research, classroom observation and individual interviews, were used to achieve the research objectives. Classroom observations were used to analyze the different types of questions and feedback the participants used in Q&A sessions as well as the pattern of questioning. Semi-structured interviews were used to learn more about the participants' difficulties in using Q&A sessions to promote interactions in the classroom.

#### 3.4.1 Classroom Observation

Totally nine Chinese History classes delivered by three pre-service teachers were observed in this research (each teacher were observed three times). Nine classes were hold in Week one, three and six apparently. For the protection of students' privacy and epidemic reasons, classroom observation was audio-recorded. The researchers would use the observation scheme (Attached in Appendix A) to record the details of nine Chinese History classes including the number of display questions, referential questions, direct feedback and indirect feedback. Also, what kind of problems existed in the



classroom when the pre-service teachers asked questions would be analyzed through the classroom observation recording. The Q&A session part in observation scheme was developed by Milla & Mayo (2014), who conducted similar research.

#### 3.4.2 Individual semi-structured interview

Nunan & Bailey (2009) mentioned that interviews can collect more in-depth data from the participates. Three pre-service Chinese History teachers were individually interviewed and used semi-structure. The interview protocol (Example questions are attached in Appendix B) was made in advance which was adjusted and enriched according to the participants' on-spot responses. Semi-structured interviews were used to learn more about the participants' difficulties in using Q&A sessions to promote interactions in the classroom. The content of the interview would conduct in Chinese first and then translate to the English and use the code to categories.

#### 3.5 Data processing and analysis

The classroom recording would be collected and translated into texts as one of data to analyze types of questions and feedback according to the categorization proposed by Campuzano (2018) and Eslami (2014) (see section 2 and 3 in literature review part) In addition, the recording was analyzed to identify the patterns of questioning using IRF model. The interview data covered the difficulties the



participants mentioned which were inductively analyzed and categorized according to the categorization proposed by Lee & Kim (2016).

## Part 4: Results and Findings

4.1 Types of questions and feedback in pre-service teachers' Q&A sessions

According to the classroom recordings, the number and the forms of the three preservice teachers used questioning and feedback in Q&A session in the Chinese History classes are shown in the Table 1, 2 & 3. DQ represents for Display Questions, RQ represents Referential Questions, IF represents for Indirect Feedback and DF represents for Direct Feedback.

	Number	DQ	RQ	IF	DF
Week 1	13	10 (77%)	3 (23%)	15%	85%
Week 3	18	12 (67%)	6 (33%)	16%	84%
Week 6	25	15 (60%)	10 (40%)	32%	68%

Table 1: The total number and forms of pre-service teacher F used in IRF mode

	Number	DQ	RQ	IF	DF
Week 1	9	8 (89%)	1 (11%)	0%	100%
Week 3	11	9 (82%)	2 (18%)	10%	90%
Week 6	15	13 (87%)	2 (13%)	13%	87%



	Number	DQ	RQ	IF	DF
Week 1	6	6 (100%)	0 (0%)	0%	100%
Week 3	11	9 (82%)	2 (18%)	10%	90%
Week 6	14	12 (86%)	2 (14%)	15%	85%

Table 2: The total number and forms of pre-service teacher Y used in IRF mode

Table 3: The total number and forms of pre-service teacher M used in IRF mode

A total number of 122 pre-service teachers' questions were recorded in the nine Chinese History classes, and among all, around 77 percent is display questions. Also, per-service teachers' feedback has been recorded, about 80 percent to 90 percent feedback that gave to the students' response are direct feedback, which is four times than the percentage of indirect feedback. From the three tables, it can be clearly seen that in Q&A session, the total number of the teacher questions increased from week 1 to 6, although the number of display questions were always more than the referential questions. Among all the Q&A session, around 55 percent were conducted in completed IRF mode and rest uncompleted IRF mode were all ending by teachers answer the questions themselves.

The types of completed IRF mode can be divided into two forms: multiple IRF mode and single IRF mode. Multiple IRF mode means when teachers ask one question and get the students' response, they would ask a follow-up or related questions for further information. While single IRF mode means only one round Q&A session with



corresponding feedback provided by the teachers. Examples are shown as following: Multiple IRF mode:

Teacher F: Why did the Qin Dynasty fall?

Student A: Because the laws used by the emperor were too severe.

Teacher F: Great, that's one of the reasons. So, if you are in Qin dynasty, to face this kind of law, how do you feel and what will you do?

Student A: I may feel very stressful and live a very careful life in case of breaking the law. For a long term, I may hardly bear it, if someone have the same feeling, we may try to think a way to change the law.

Teacher F: Yes, many people in Qin dynasty had the same idea as yours, so in the end, some of them tried to protest. So, what else may be the reasons that caused the fall of Qin dynasty?

Student B: May be because of heavy tax.

Teacher: Yes.....So.....

Single IRF mode:

Teacher M: How many countries did the Qin Dynasty consist of?

Student A: Six.

Teacher M: Yes, so today we will learn policy of Qin dynasty.

From the classroom observation, two types of IRF mode were both appeared in the classes. Multiple IRF mode usually happened when the teachers raised a referential question which may receive students' various answers. Single IRF mode usually



happened when the teachers raised a display question. Comparing the numbers of two types, single IRF mode were around three times of multiple IRF mode. And in the study, it found that all of the three teachers liked to use some display questions to set a stage for a referential question. Also, when teachers used multiple IRF mode, instead of using it on one student, they asked more students to answer. From the interview, three teachers said that for most multiple IRF mode, they did not prepared follow-up or related questions, they raised next questions based on students' response, and the main aim to do so was because they would like to seek for further answers, or they would like to learn more ideas from other students if the students raised their hands and felt willing to share the thoughts.

While for the uncompleted IRF mode, it usually ended by teachers answer the questions themselves. For example:

Teacher Y: Why the Qing dynasty used the same road width?

(No response from the students.)

*Teacher Y: Is it because the same road width will be convenient for all the six countries, right?* 

(No response from the students.)

Teacher Y: Right, so because of this reason, the emperor made the order that all the roads should be in the same width.

This situation was commonly seen in the first or second week and all of the three



teachers got this situation. In the first week around 60 percent Q&A session was completed by teachers themselves if they found there was no response from the students. However, during the whole six weeks internship, this phenomenon has decreased with the development of time from the week 1 around 60 percent to week 3 around 43 percent and in the final week around 32 percent.

From the classroom observation, teachers' feedback was also analyzed. It recorded that about 80 percent to 90 percent per-service teachers' feedback that gave to the students' response were direct feedback and only 10 percent to 20 percent were indirect feedback. The study also found that although three pre-service teachers have been trained how to use Q&A session in the university but in the real classes, pre-service teachers cannot make a qualified and useful feedback, especially for the indirect feedback. It can be divided into three types of unqualified indirect feedback as shown in the following examples:

(a) Ignored students' wrong answers and turned to ask other students

Teacher F: What were the benefits of emperor Qin's unification of writing?

Student A: It can make people all over the country use the same language.

Teacher F: Well.....Do other students have other answers?

Student B: Because the Qin Dynasty unified the six states....., it would be convenient for the administration of the court and the implementation of decrees.

Teacher F: Yes, that's a good answer.

(b) No guide questions or hints for students to correct their wrong answers



Teacher Y: Teacher Y: Why did Chen Sheng put a note in the fish saying that he could become emperor?

Student A: Because normally there is no note in fish, people would think it was put there by a God.

Teacher Y: Then....?

Student A: Maybe people believed in gods in that age?

Teacher Y: Therefore, people would think that Chen Sheng became emperor because it was the will of God and should not go against the will of God to prepare for his natural uprising as emperor. Isn't it?

Student A: Yes.

(c) Ask students to find the right answers from the content

Teacher M: Why did the Communists choose to receive Soviet help?

Student A: Is it because the Communists don't have enough people so they can't fight with the enemies?

Teacher M: Yes, but not the only reason, please open the book and turn to page 72, and find the answer

Student B: Also, because they lacked money and.....

From the three example dialogues, it can be seen that pre-service teachers did not know how to use indirect feedback to guide students for further thinking and correct the answers by themselves, which went against the original purpose of using indirect feedback. Students have no chance to think deeper or make self-correction.



#### 4.2 Difficulties pre-service teachers encountered in Q&A sessions

Through the interview, after seeing the classes recording and recalling three preservice teachers' perception before starting to teach the classes. All of the three preservice teachers mentioned that it was completely different from their expectation when using the Q&A session in the classroom. From the data that collected from the interview, the difficulties that pre-service teachers met in the classroom can mainly divided into four parts: (a) no or few students' response; (b) limited classroom time; (c) poor skills in giving indirect feedback; (d) lack experience.

For the first difficulties, three pre-service teachers were all mentioned that students were used to have teacher-centered mode, so in the first two weeks, it was hard for them to apply the Q&A session in the classroom. Even they repeated questions for many times, there was no response from the students or only one or two students answered their questions, but other students just waited for teachers to tell them the answers. For the second difficulties, from both classroom observation and interview, it found that in the nine observation classes, almost all the classes were ended in a hurry, some of the classes even could not finish all the content as planned on the teaching plans. Three preservice teachers complained that when using Q&A session, students' responses were hard to predict, and sometimes they needed to wait for a long time for students to think out answers and for some referential questions, it might lead to a small discussion among the students, which was hard for the teachers to control the time. Also, when giving the indirect feedback, because the feedback was unqualified, so it took students



more time to find the correct answers, which lead to less classroom time. The third difficulties was caused by less preparation, all of the three pre-service teachers mentioned that sometimes students' responses were beyond their mind, and they could not make a quick response to help the students make self-correction, which led to the result that they ignored students' wrong answers and asked other students to answer, or give few hints or guide questions for students to think more. For the last difficulties, three pre-service teachers said that before the internship, there was no in-service teachers give them chances to observe how to use Q&A session in classes and when they learnt in the universities, there was no sufficient training in practice, they only learn the theory.

#### Part 5: Discussion

In this study it found that when pre-service teachers used Q&A session, they all applied IRF mode which confirm the result that provided by Newman, Griffin & Cole (1989) that IRF mode is normative within a particular culture, like the one in Hong Kong traditional education. However, pervious studies did not divided IRF mode into different types. In the study it found that IRF mode has two types: multiple and single. The multiple IRF mode were usually appeared when teachers used referential questions but the times of multiple IRF mode was much less that single IRF mode. Single IRF mode were often applied when teachers raised display questions. It also found that except completed IRF mode, uncompleted IRF mode was also shown during the classes.



In this study uncompleted IRF mode always happened when teachers answered questions themselves in the Q&A session if they found there was no response from the students. Also, this phenomenon declined with the development of time, but it still existed even in the last week of teaching.

Another finding was that three pre-service teachers did have signs to turn Q&A sessions into a monologic recitation script, since sometimes they ignored students' wrong responses and asked other students to express their thoughts or asked the students to find the answers from the book content. Same result has shown in both of Chin (2006)'s study and Tharp & Gallimore (1991)'s study that IRF mode sometime restrict students' thought. Besides, this study also showed that pre-service teachers were always lack of experience, and when using the Q&A session, they are easily to answer the questions themselves (uncompleted IRF mode) which turned into teacher-centered classes. It got the similar result from the study of Mansour, 2009; Henning et al. as mentioned in literature review.

For the part of teacher feedback, in the previous studies, indirect feedback were not divided into different types, but in this study, it is found that teachers' indirect feedback could be divided into three types: answering by themselves, asking other students to answer, asking students to correct their answers by reading the content. From the dialogue, it also found that pre-service teachers could not provide students with qualified indirect feedback even they have been trained in the universities.



Similarly, the problems of using Q&A in classes were also shown the same results in previous studies (Kachur & Prendergast, 1997) three pre-service teachers all admitted that although they accepted related educational training in the universities, but it only taught them theories, which made it hard to be applied in the real classes.

On the other hands, lack of using Q&A session experience was also found in this study. Three pre-service teachers mentioned that the original teachers were used teacher-centered mode, which not only has no reference value to them, but it also results in students getting used to the teacher-centered mode and finding it difficult to use Q&A session for the first or two weeks to motivate students join classroom which is similar to the result that provided by Kachur & Prendergast (1997)'s study that what the classroom used to be will affect the students' learning habit. Limited class time is another problem that met in the practice. It is hard for the pre-service teachers to manage the class time, like mentioned by many researchers such as Yang's study (2011) as mentioned in previous literature review.

#### Part 6: Implication

In order to help pre-service well prepared for questioning practice, teacher educators should consider how to promote their questioning and feedback skills in teacher program in the following ways.



Firstly, teachers' training program should be more specific, not only focus on the theories but more focus on how to create an effective classroom dialogue. Lee & Kim (2016) gave the similar suggestion that teachers' training program should include more investment in the effective use of classroom dialogue.

Secondly, pre-service teachers should be well-prepared before the class, they should assume the answers students are likely to give and be prepared to respond accordingly, so that they can give qualified feedback instead of using the feedback in a incorrectly way.

Thirdly, other related research also suggested that pre-service teachers should fully understand the teaching and learning process, and should be able to ask who, what and why questions, so that they can make immediately qualified questions in the classes.

#### Part 7: Limitation

Readers should pay attention to some limitations in this study. Firstly, it is a smallsized study whose findings can hardly represent the whole situation thus lacking generalization. Secondly, six-week internship is not a very long observation time, so the result may not so obvious, and it may change in long-term studies. Thirdly, the data that collected from the recording classes is limited, so the total numbers of questioning and feedback can only represent for the result of this study, it remains to be discussed



how question and feedback type and practice pattern in Q&A sessions affect the classroom interaction.

#### Part 8: Conclusion

In this study, it reveals Chinese history pre-service teachers' questioning practices which has been less mentioned in the literature. The findings show that the participants encountered a number of difficulties in asking questions to promote classroom interaction because of little experience, limited class time poor classroom management, poor skills in raising indirect feedback. And most Q&A session that used by pre-service teachers were conducted in IRF mode, including completed and uncompleted modes. Display questions and direct feedback were most used in Q&A session, and three types of indirect feedback existed in this study.

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Date:	
Subject: Chinese History	
Class Size:	
Class Level:	
Internship Week:	
Topics:	

Appendix A: Sample of observation scheme

Categories	Frequency	Content	Other special notes
Display Question			
Referential Question			
Indirect Feedback			
Direct Feedback			
Students' response			
Students' follow-up question			

# Appendix B: Interview guide for pre-service teachers

Date:



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Duration:	
Location:	
Sex:	
Form of students:	

1. In the preparation week, when you observing your supporting teacher taught, did he/she use any questioning or feedback during the lesson?

- If so, what types of questioning and feedback did he/she conduct in the class? And how was the students' response and class interaction?
- If not, what kind of teaching activities he/she used in the class? And how was the students' response and class interaction?
- 2. During the six weeks, what kinds of questioning and feedback have you tried during

the lessons? And why you choose to use those ways of questioning and feedback?

3. How did your students respond to your questions and feedback? Is there any change in the class interaction comparing to the preparation week?

- If so, what is the change? And for what reasons caused those changes?
- If not, for what reasons caused this result?

4. Please listen to the class recording and review the journals you have written before. Is there anything different from what you expected when you did the preparation before starting the lessons?

- If so, what is the difference? And what kinds of factors may cause the difference?
- If not, do you think you have achieved your teaching objectives by asking questions



and giving feedback in class?

- 5. What do you think are the positive and negative effects of asking questions and giving feedback?
- 6. Do you meet any obstacles when asking questions and giving feedback in practice?
- 7. Do you anything else that you would like to share?

