

A Study on Feedback Literacy of Pre-service English Teachers Based on Educational Practice

Aiyu Li¹

¹ Boluo Primary School, Liangshan, China

ABSTRACT

Feedback literacy was initially defined as students' "ability to read, understand and write feedback". With the supplement and development of feedback literacy research, teacher feedback literacy has gradually become a frontier topic in recent years. It is defined as the knowledge, professional skills and characteristics in the feedback process, with the purpose of enabling students to accept feedback. Teacher feedback literacy is the key factor to ensure feedback effect and improve teaching efficiency. Current research on teacher feedback literacy mainly focuses on theoretical research, form research, implementation method research, context-based research, and the relationship between other feedback, etc. Most of the research objects are in-service teachers, but little is known about the feedback literacy of pre-service English teachers. In view of this, this paper investigates the feedback literacy of 100 pre-service English teachers who have just finished their educational practice through the mixed research method of questionnaire survey and interview, aiming to study the following questions: (1) What are the characteristics of pre-service English teachers' feedback literacy? (2) What factors affect the feedback literacy of pre-service English teachers? This study uses the Feedback Literacy Scale for English Teachers. 100 pre-service English teachers are selected as research objects. spss 27.0 software was used to analyze the questionnaire data and explore the current states and characteristics of pre-service English teachers' feedback literacy. In addition, three interviewees who have received questionnaires are selected as interview subjects, and the feedback experience and challenges encountered by individual pre-service English teachers who have had internships are discussed in depth, which obtains rich qualitative data. The results show that: 1) the feedback literacy of pre-service English teachers is above the average level, but the level of feedback design and technology application still needs to be improved. 2) The feedback literacy of pre-service English teachers is affected by subjective factors such as the gap between theory and practice, lack of feedback ability, teachers' emotional stress, as well as the exam-taking system, class size, practice depth and other conditions.

Keywords: *Teacher feedback literacy, Pre-service teacher, Current states.*

1. INTRODUCTION

This chapter introduces the background of the study, and then proposes two main questions of the study, and finally, illustrates the purpose and significance of the study.

1.1 Research Background

As a new concept emerging in the past decade, feedback literacy was first defined by Paul Sutton in 2012 as students "ability to read, understand and write feedback" and pointed out that feedback literacy has three interrelated dimensions:

epistemological dimension, ontological dimension and practical dimension.

The current stage of research on teacher feedback literacy mainly focuses on five categories: theoretical research on teacher feedback literacy, research on types of teacher feedback literacy, research on implementation methods of teacher feedback, research on teacher feedback literacy based on specific situations, and research on the relationship between teacher feedback and other feedback, etc.

At present, most literature focuses on the feedback literacy of in-service teachers, yet there

are few studies on teacher feedback literacy of pre-service English. Since the pre-service stage is the first stop of teachers' career (Lortie 61), the cognition and improvement of feedback literacy in this period is of great importance to teachers. For pre-service English teachers, educational practice provides a valuable opportunity to practice and improve their teaching and feedback skills. Therefore, teacher feedback literacy of pre-service English teacher based on educational practice has important research implications.

1.2 Questions of the Study

The study focuses on the following two questions:

- (1) What are the characteristics of pre-service English teachers' feedback literacy?

The learning promotion effect of feedback makes it "one of the most important influencing factors for students' learning" (Hattie & Timperley 102). Whether the effect of feedback on learning promotion can be brought into play depends largely on the level of teachers' feedback literacy (Xu *et al.* 60). The feedback literacy of teachers in the pre-service period provides the foundation for their later growth. Therefore, this study uses a questionnaire called a Feedback Literacy Scale for EFL Teachers which is developed and validated by Zhao and selects pre-service English teachers as the main object.

- (2) What factors affect the feedback literacy of pre-service English teachers?

This study uses questionnaire to investigate the current states and characteristics of pre-service English teachers' feedback literacy. Interviews are conducted with 3 pre-service English teachers as qualitative research to analyze the factors affecting feedback literacy of pre-service English teachers.

1.3 Purpose and Significance of the Study

The purpose of this study is to illustrate the characteristics and influencing factors of pre-service English teachers' feedback literacy. Specifically, the study uses a mixed research method, including questionnaire survey as quantitative research and interview as qualitative research. The significance of this study is to explore the feedback literacy of pre-service English teachers based on the data collected from educational practice, so as to provide references for the training of English teachers in China.

Specifically, based on the theoretical framework of teacher feedback literacy and the study combined qualitative and quantitative analyses to the current situation, characteristics and influencing factors of feedback literacy of pre-service English teachers.

2. LITERATURE INTERVIEW

This chapter provides a review of the relevant literature. The first part reviews the concept of feedback and feedback literacy. And then reviews the concept and five main study categories of teacher feedback literacy. The first four categories are elaborated.

2.1 Feedback and Feedback Literacy

Feedback - the process of providing information to learners with the aim of narrowing the gap between actual performance and desired goals (Hattie & Timperley 102). Feedback is one of the most important factors influencing learners' academic performance (Hattie & Zierer 15).

Sutton first defined feedback literacy as "the ability to read, interpret and use written feedback", including three interrelated dimensions: epistemological dimension, ontological dimension and practical dimension (Paul Sutton 31).

This is the beginning of the study of feedback literacy, laying a foundation for the following study. Nevertheless, the subjects of most studied mainly focused on students, few researchers chose to focus on teachers feedback literacy, whether in-service teachers or pre-service teachers.

2.2 Teacher Feedback Literacy

The development of students cannot be separated from teachers. With the continuous emergence of teacher feedback literacy research in recent years, feedback literacy research has gradually focused on students and teachers (Xu *et al.* 61). Teacher feedback literacy is defined as the knowledge, professional skills and characteristics of the feedback process, which aims to enable students to accept feedback and lay the foundation for the development of student feedback literacy (Carless & Winstone 153).

After reading and summarizing relevant literature, the research on teacher feedback literacy can be divided into five categories: theoretical research on teacher feedback literacy, research on forms of teacher feedback literacy, research on implementation methods of teacher feedback,

research on teacher feedback literacy based on specific situations, and research on the relationship between teacher feedback and other feedback.

Based on the relevance to the topic of the study, the researcher selects first four categories for literature review.

2.2.1 Theoretical Research of Teacher Feedback Literacy

There are many studies on the theoretical research of teacher feedback literacy, including the dimensions and connotation of feedback literacy. In terms of dimension research, Carless & Winstone also propose three dimensions of teacher feedback literacy, namely design dimension, relational dimension and pragmatic dimension, which initially formed the framework of teacher feedback literacy. In addition, Xu & Zhang find that learning feedback should be regarded as a separate dimension to complement the conceptual framework of Carless & Winstone when developing and verifying the feedback literacy scale for Chinese college English teachers. Xu et al. believe that teacher feedback literacy is a personal trait, including cognition, ability, emotional attitude, etc. The cognitive dimension includes feedback professional knowledge and feedback concept. The capability dimension includes design feedback, implement feedback, reflect feedback; The dimensions of affective attitude include feedback attitude, attention to one's own emotions and attention to students' emotions. Based on literature review, a multi-dimensional continuous framework of teacher feedback literacy is proposed. In terms of conceptual research, Xu et al. think that teacher feedback literacy can be regarded as a multidimensional collection of knowledge, ability and emotional attitude related to feedback that teachers currently possess under a certain social and cultural background, and its process is affected by social, cultural, space and time factors (Gravett 11). Moreover, with the development of information technology, the form of digital teaching feedback based on audio and video presents a new connotation of teacher feedback literacy (Dong et al. 37).

Although there is no theoretical research on pre-service English teachers' feedback literacy, these studies provide a theoretical framework for future research.

2.2.2 Research on the Forms of Teacher Feedback Literacy

In the types of teacher feedback literacy research, mainly focuses on feedback talk and written feedback. Marion Heron *et al.* first distinguish between feedback conversation and verbal feedback, and places it in the context of higher education. After studying the discussion of 6 university teachers and interviewing two of them, it is concluded that the main purpose of the feedback talk is to encourage participation, ask questions and remind, reflecting the encouragement and recognition of the emotional dimension of teaching, and showing such signs as affirmation, consolidation, consolidation and consolidation. elaboration and other indications. In terms of written feedback, current research is mainly focused on writing, especially written error-correcting feedback in second language writing. However, Xu & Li for the first time changed their research topic to the decision-making process of written feedback. They focused on two college writing teachers and analyzed their written feedback texts and other materials through investigation. It is concluded that the formation process of written feedback includes three parts: identification of problems, reference assessment and feedback formation. Moreover, teachers' role positioning and beliefs have a great impact on the formation of written feedback. Xing & Wang explore the influence of written feedback from different sources on students' writing performance, among which the combination of peer written feedback and teacher written feedback had the best effect.

The correct and timely use of oral feedback and written feedback performs an important role in the teacher feedback literacy of pre-service English teacher, related issues are also reflected in the questionnaire.

2.2.3 Implementation Methods of Teacher Feedback

In the research on the implementation methods of teacher feedback, Boud & Dawson summarized and analyzed 62 university teachers' conversations about feedback from five universities in Australia, and proposed that teacher feedback literacy should be carried out from three levels, namely, curriculum design and development; middle level: design and implementation of curriculum units; micro level: feedback practices related to student assignments.

The three levels contain a total of 19 abilities, which puts forward high requirements on the overall ability of teachers feedback literacy. Xu & Carless studied the feedback process of university teachers, and summarized the specific implementation methods of feedback using classroom evidence and teacher interviews, including three stages of introduction, preparation and implementation, to promote students' cognitive and social-emotional dimensions. Teachers should also change the concept of feedback, attach importance to formative evaluation, pay attention to the emotional attitude dimension of feedback literacy, and listen to students' voices (Xu et al. 2023).

The implementation of feedback is an important part of teachers' feedback ability, also influencing learning promotion of teacher feedback literacy. Thus, the ability of implementation feedback for pre-service English teacher deserves attention.

2.2.4 Context-based Teacher Feedback Literacy Research

The context-based teacher feedback literacy research is based on a certain type of classroom and a certain era background. Qin & Zhou put forward a teacher feedback literacy model based on automatic writing assessment system, which will develop teacher feedback literacy throughout the process of pre-class design, in-class implementation and after-class reflection of writing. Xu investigated 12 newly recruited foreign language teachers and discussed the influence of multi-lesson teaching experience in the teaching environment on the development of teachers feedback literacy. Based on the writing curriculum, Lee proposed a framework of writing teacher feedback literacy, namely, feedback as a process, feedback as a shared responsibility in a specific context, and feedback as a teacher's ability. Dong et al. compiled an assessment scale of teacher' feedback literacy based on the background of China's informationization 2.0 era.

Classroom-based teaching feedback is the focus of the study, which is the important behavior that affects the teaching quality and the overall level of teacher feedback literacy.

3. RESEARCH METHODOLOGY

This chapter makes a detailed description of the research design of this study. First, the research questions are proposed. Secondly, the participants of this study are introduced. Thirdly, two research instruments and their implementation process are introduced clearly. Finally, this paper introduces a data analysis method to investigate teacher feedback literacy.

3.1 Research Questions

The research questions of this study are:

- (1)What are the characteristics of pre-service English teachers' feedback literacy?
- (2)What factors affect the feedback literacy of pre-service English teachers?

3.2 Participants

100 pre-service English teachers were randomly selected as the participants of this study. They were all teacher-oriented English majors, with 8 males and 92 females. They all finished their education practice as English teacher in different grades, thus having specified experience in giving teacher feedback. The objective data of such empirical pre-service English teachers could provide vital evidence for teacher feedback literacy research.

When the questionnaire was finalized, the researcher made an online questionnaire and shared the questionnaire link with the participants. A total of 108 questionnaires were collected by the researcher. 8 invalid questionnaires were excluded, finally, 100 questionnaires were effective and valid. The demographic information of all participants was shown in "Table 1".

Table 1. The demographic information of participants

	N	%	Cumulative percentage
Gender			
Male	8	8%	8%
Female	92	92%	100%
Educational background			
Bachelor	98	98%	98%
Master	2	2%	100%

	N	%	Cumulative percentage
Type of practice school			
Elementary school	32	32%	32%
Junior school	39	39%	71%
High school	29	29%	100%
Practice duration			
1-3 months	92	92%	92%
4-6 months	6	6%	98%
Over 6 months	2	2%	100%

As shown in “Table 1”, there are 92% female pre-service English teacher of the pre-service English, reflecting those female students outnumbered male participant. As a matter of fact, the gender ratio of the pre-service English teachers is sharply unbalanced. There was no intervention on the educational background and number of students, because the relevant date comes from the random filling after the researcher issued the questionnaire. According to the answers of the participant, 98% are bachelors, 2% are masters. There is no PhD students as a pre-service English teacher to answer the questionnaire. Regarding the type of practice school, 32% of the participants finished their practice tasks in the elementary schools, 39% of the participants were in the junior. The percentage of the pre-service English teachers who did the internships in the high schools were the lowest, accounting for 29%. Nevertheless, to some extent, there was similarity in the percentage of there types of practice schools. For the practice duration, the percentage of participants who had internships less than 3 months dramatically exceeded that of in 4-6 months and more than 6 months (92%, 6% and 2% respectively). It can be clearly seen that most of the participants have short-term practice as pre-service English teachers.

3.3 The Instruments

A mixed research method was applied in this study, which refers to an approach to inquiry involving collecting both quantitative and qualitative data. (Creswell 4).

The study chooses questionnaires and semi-structured interviews as the main tools. The questionnaire aims to obtain the data of feedback literacy of pre-service English teachers based upon educational practice and provide a basis for the subsequent quantitative analysis. The purpose of the semi-structured interview is to echo the contents of the questionnaire and abstain abundant qualitative data, facilitate the specific factors of the

teacher feedback literacy of the pre-service English teachers as well as the in-depth information.

3.3.1 Questionnaire

The teacher feedback literacy questionnaire used in this study referred to a Feedback Literacy Scale for EFL Teachers developed and validated by Zhao (2024). There are 36 items in the feedback literacy questionnaire. The first 4 items are about the demographic information (item 1, 2, 3, 4). And the remaining 32 items are six dimensions of teacher feedback literacy, they are cognitive dimension (item 5, 6, 7, 8), design capability (item 9, 10, 11, 12, 13, 14), technology use (item 15, 16, 17, 18), teacher-student relationship (item 19, 20, 21, 22), implementation capability (item 24, 25, 26, 27, 28). The last dimension of the feedback literacy questionnaire is affective attitude dimension (item 30, 31, 32, 33, 34, 35, 36). Except the demographic information, the other subjects may score between 0 and 160.

Except for the demographic information, the remaining 32 items were measured using a 6-point Likert scale, with 0, 1, 2, 3, 4 and 5 corresponding to strongly disagree, disagree, kind of disagree, kind of agree, agree, strongly agree respectively. The feedback literacy questionnaire was written in Chinese to reduce misunderstanding.

3.3.2 Semi-structured Interview

In this study, three pre-service teachers were selected to conduct semi-structured interviews, and then the interview recordings were transcribed. They just completed their educational practice and they are with the same teacher-oriented English educational background.

The interview questions are as follows:

1. Do you think there is a gap between your feedback theory and feedback practice? What are the differences?

2. What objective factors affect the implementation of your feedback?

3. Feedback based on the use of technology has a great impact on the feedback literacy of teachers in the new era. What is your opinion on this?

4. How do you give feedback when students give wrong answers?

5. What do you think of the effect of educational practice on feedback literacy?

3.4 Data Analysis Methods

The study entails two methods to analyze the data: statistical analysis of the data collected by the questionnaire survey and thematic analysis of the interview records.

3.4.1 Method to Analyze the Quantitative Data

The SPSS 27.0 online analysis tool was used to analyze the questionnaire results.

The researcher used SPSS 27.0 to analyze following data:

First, Cronbach's alpha was used for reliability analysis, which was first named by the American scholar Lee Cronbach in 1951. It tests whether the research data were accurate and reliable, specifically, whether the results obtained were consistent when the questionnaire was used to measure the research subjects repeatedly. Generally, the reliability coefficient should be between 0 and 1. Wu detailed that if this value is above 0.9, the reliability of the scale is good; if this value is between 0.8 and 0.9, then the reliability is acceptable; if the reliability coefficient is between 0.7 and 0.8, it means the scale needs to be revised for some items; if the reliability coefficient is below 0.7, the scale needs to be discarded for some items.

The Cronbach's alpha coefficient of the data is $0.962 > 0.80$, the reliability of the questionnaire is relatively high. Other than the values of Cronbach's alpha of the whole questionnaire, the reliability of each dimension of the questionnaire deserves attention. The relevant value is shown in "Table 2", including other six questionnaire dimensions: cognitive dimension (CD), design capability (DC), technology use (TU), teacher-student relationship (TSR), implementation capability (IC), affective attitude dimension (AAD).

Table 2. The reliability of questionnaire

	Overall	CD	DC	TU	TSR	IC	AAD
Cronbach's alpha	0.962	0.887	0.889	0.910	0.900	0.887	0.927

a Notes: cognitive dimension (CD), design capability (DC), technology use (TU), teacher-student relationship (TSR), implementation capability (IC), affective attitude dimension (AAD)

According to the above "Table 2", the value of the Cronbach's alpha is all higher than 0.8. Therefore, it can be said with certainty that each dimension is with high reliability.

Second, exploratory factor analysis of the collected data was conducted to explore the factor composition of teacher feedback literacy for pre-service teacher. KMO and Bartlett's sphericity tests were used to test the adequacy of sampling and the suitability of factor analysis. If the KMO value is greater than 0.8, the validity is very high. In other words, KMO indicates the amount of variance shared among the items designed to measure a latent variable when compared to that shared with the error. Kaiser recommends accepting values greater than 0.5 as acceptable. More specifically, values between 0.5 and 0.7 are considered mediocre, values between 0.7 and 0.8 are considered good,

values between 0.8 and 0.9 are deemed great (Hutcheson & Sofroniou 27). A value more than 0.7 is the common threshold for confirmatory analysis (Hair et al. 115).

The data of the KMO values and Bartlett's spherical test values are tested. The results of the analysis showed that the KMO value for the scale was $0.898 > 0.8$, with good validity of the structure. The Bartlett's spherical test value of this scale was .000, which means that this result is less than the significance level of 0.05, indicating that the validity of the scale is high.

All in all, the data analysis has showed that the Teacher Feedback Literacy Scale for the pre-service English teachers has good reliability and validity.

- The values of scoring rate of each dimension are shown in order to directly see the level of different dimensions.
- Independent-Samples T Test and one-way ANOVA were adopted to analyze differences in teacher feedback literacy among pre-service English teachers demographically.

3.4.2 Method to Analyze the Qualitative Data

The qualitative data also has been analyzed to interpret further and get the profound findings. The researcher interviewed 3 pre-service English teachers and transcribed the recording into text.

4. RESULTS AND DISCUSSION

This chapter presents the main findings of this study. The first part describes the results of questionnaire, including the descriptive results, demographic differences of the questionnaire survey. Finally, the conclusion of the questionnaire is described. The second part presents the results of the interview and analyze the influencing factors of pre-service English teachers' teacher feedback literacy.

4.1 The Characteristics of Pre-service English Teachers' Feedback Literacy

According to the results of the questionnaire survey, the characteristics of pre-service English teachers' feedback literacy will be summarized.

4.1.1 Descriptive Results

The researcher conducted a descriptive analysis of all data to get a preliminary understanding of the current level of teacher feedback literacy among pre-service English teacher who has finished educational practice.

KS (Kolmogorov-Smirnov) test was performed on the data, with significance of each factors less than 0.05, indicating that 100 valid data do not correspond to normal distribution. The mean score of teacher feedback literacy for these pre-service English teachers is 127.06, with the maximum score at 160, the minimum score at 58; the scoring rate is 79.41%. It can be seen that the scoring rate of teacher feedback literacy close to 80%. In this sense, the teacher feedback literacy of the subjects reaches the upper-intermediate level.

Besides, the scoring rate of each dimension in teacher feedback literacy shown in the "Table 3".

Table 3. The scoring rate of factors of each dimension(%)

	Overall	CD	DC	TU	TSR	IC	AAD
The Scoring Rate (%)	79.41	82.20	78.30	72.05	82.15	80.13	80.62

a Notes: cognitive dimension (CD), design capability (DC), technology use (TU), teacher-student relationship (TSR), implementation capability (IC), affective attitude dimension (AAD)

The researcher takes the scoring rate of the whole teacher feedback literacy (79.41%) as the yardstick to measure all the six dimensions. The scoring rates of pre-service English teachers in cognitive dimension (82.20%), teacher-student relationship (82.15%), implementation capability (80.13%), affective attitude dimension (80.62%) all exceed 79.41%. Therefore, it can be concluded that these four dimensions contribute more to the overall level of pre-service English teachers' teacher feedback literacy. What's more, design capability and technology use have been less satisfactory contributors, because the scoring rate of it is less than 79.41% (78.37% and 72.05% respectively).

4.1.2 Demographic Differences

The researcher uses "gender", "educational background", "type of practice school", "practice duration" as independent variables, the overall teacher feedback literacy of pre-service English teacher was taken as the dependent variable. Due to the dichotomous nature of the independent variables "gender", and "educational background", the independent sample t-test should be used to check the difference in the means. The relevant results are described in the "Table 4".

Table 4. Independent sample T-test of two independent variables

Independent variables	Overall Teacher Feedback Literacy				
	N	M	SD	t	p
Gender					
Male	8	3.68	1.187	-1.176	0.243
Female	92	4.00	0.682		
Educational background					
Bachelor	98	3.97	0.731	-0.392	0.696
Master	2	4.17	0.994		

Because the independent variables, “type of practice school” and “practice duration” are all trivial or above. And there is a continuity in the both of two independent variables, so independent

sample t-test do not apply to the situation. The researcher used a one-way analysis of variance (ANOVA) to analyze the differences, which are shown in the “Table 5”.

Table 5. One-way ANOVA of other two independent variables

Independent variables	Overall Teacher Feedback Literacy			
	N	M	F	p
Type of practice school				
Elementary School	32	4.08	0.722	0.488
Junior School	39	3.97		
High School	29	3.85		
Practice duration				
1-3 months	92	3.96	0.156	0.856
4-6 months	6	4.01		
Over 6 months	2	4.25		

According to the “Table 4”, the p-values of “gender” and “educational background” are both greater than 0.05, so the t-test results of these two factors on the overall teacher feedback literacy of pre-service English teacher were not significant. The results indicate that there is no significant difference between the teacher feedback literacy of pre-service English and their gender and educational background, which will not have a significant impact on their overall level.

In addition, according to the “Table 5”, in the specific ANOVA process, if the P-value is less than 0.05, it indicates that there are at least two significant differences in the overall teacher feedback literacy, which exactly need further comparative research. However, if the P-value is greater than 0.05, all samples are not significantly different. In the Table 4.3, the p-value of the independent variables “type of practice school” and “practice duration” on the overall teacher feedback literacy is not greater than 0.05, so there is no significant difference between the teacher feedback literacy of the pre-service English teacher with

different types of practice school and different lengths of practice.

4.1.3 Questionnaire Survey Conclusion

In brief, results indicate that overall feedback literacy of pre-service English teachers is at the upper-intermediate level. In the questionnaire survey, the teacher feedback literacy is divided into six dimensions, which Constitutes the theoretical structure. Among these dimensions, the pre-service English teacher did best in cognitive dimension because of the highest scoring rate of that, and the scoring rates of cognitive dimension, teacher-student relationship, implementation capability, affective attitude dimension all exceed that of overall level of pre-service English teachers. The lowest scoring rate of pre-service English teachers is in technology use, and the scoring rates of design capability and technology use both below that of the overall level. These are the current status and characteristics of pre-service English teachers’ feedback literacy.

4.2 *The Factors Affect the Feedback Literacy of Pre-service English Teachers*

The thematic analysis was chosen to analyze the interview texts. The interview results are shown as follows:

- Do you think there is a gap between your feedback theory and feedback practice? What are the differences?

Interviewee 1: I think there is a big gap between the two, after all, theory is just on paper. For example, I know that the main types of feedback are oral feedback and written feedback, but when I need to give oral feedback in the actual class, it is always not timely and clear.

Interviewee 2: As a practice teacher, I was very nervous in class, so I could not give feedback smoothly and naturally.

Interviewee 3: What impresses me is the gap in feedback design, which is always not up to proficiency of other teachers.

- What objective factors affect the implementation of your feedback?

Interviewee 1: Feedback needs a certain amount of time, and at some point I choose to give lectures to students. To some extent, the exam-oriented system limits teacher feedback.

Interviewee 2: I get annoyed about giving feedback when the class is large.

Interviewee 3: As a practice teacher, I am concerned that spending a lot of time based on feedback will affect students' test scores.

- Feedback based on the use of technology has a great impact on the feedback literacy of teachers in the new era. What is your opinion on this?

Interviewee 1: To be honest, I rarely give feedback with technology, and I need to improve that.

Interviewee 2: This is an inevitable requirement for education with the development of the times, but I still prefer to give feedback face-to-face.

Interviewee 3: There's a lot of software that I hadn't thought of before that can be used to give feedback, which is good, but at the same time it puts demands on students' acceptance.

- How do you give feedback when students give wrong answers?

Interviewee 1: Intellectually, I know that I should encourage them first, but sometimes I choose to correct my mistakes directly.

Interviewee 2: I will give emotional encouragement first, because I am afraid that if I corrected my mistakes too harshly, the students would lose interest in my class.

Interviewee 3: I'll encourage a little, but still focus on correcting mistakes.

- What do you think of the effect of educational practice on feedback literacy?

Interviewee 1: In the practice, I can realize my deficiency in feedback literacy and make adjustments after the practical classroom. In addition, the educational practice also provides me with a valuable opportunity to communicate with in-service teachers.

Interviewee 2: Classroom observation and communication with them has greatly improved my feedback literacy.

Interviewee 3: It has a positive impact on the improvement of our teachers' feedback literacy, but the effect of short-term educational practice is not obvious.

4.2.1 *Gap Between Theoretical Knowledge of Teacher Feedback Literacy and Practice*

In the interview, all the interviewees said that they had certain cognition of feedback literacy, knew the importance of implementing feedback in practical teaching, and affirmed the role of feedback in learning. The three teachers also knew the two main forms of feedback - oral feedback and written feedback. But at the same time, the two interviewees also clearly realized their own lack of feedback awareness, and could not apply the theory to practice flexibly. In the practical class teaching, the oral feedback is not timely and smooth. Feedback activities are few and blunt. Lack of sensitivity to reactions from the students. All these are the indication of the gap between pre-service English teachers' feedback theory and practice, and also the manifestation of their insufficient feedback capability.

4.2.2 Objective Factors That Limit the Feedback Implementation

In addition to their own lack of feedback ability, the interviewees also mentioned objective factors that limit teachers' feedback.

In the practical English teaching, the test-oriented system is serious. The pursuit of grades cause more class time to be devoted to the transfer of knowledge and skills, thus neglecting the application of feedback. This may also explain why the results of above questionnaire survey show that the overall teacher feedback literacy of pre-service English teachers decreases with the increase of the grade in which they practice: because the exam-oriented education in primary schools is not as serious as that in middle and high schools, accordingly, teachers have more space and time to give feedback in class and after class, and the teacher feedback literacy is also improved.

Furthermore, one interviewee mentioned that "when dozens of students in the class sit in the classroom, it is unrealistic to give feedback alone. The feedback is more superficial, and the feedback effect is not ideal." So, class atmosphere, number of people, these factors may also affect teacher feedback.

4.2.3 Wide Application of Digital Teaching

In order to meet the requirements of information-based teaching, the interviewed pre-service teachers said that they would use various digital intelligent technologies and platforms in their practice to solve the difficulties in feedback, but such technologies were not used with high frequency, and the types of technologies used were not comprehensive. They use digital platforms to do some ancillary work, but the actual process of providing feedback tends to be face-to-face.

4.2.4 Application of Emotional Encouragement

All the three interviewed teachers mentioned the importance of emotional encouragement. Emotional encouragement is the key to maintaining teacher-student relationship and resonate with students.

Sincere and relevant feedback information, high attention to students' emotions, tolerance of students' mistakes, these are the key to the

implementation of emotional feedback. However, due to the unfamiliar and rusty teaching, student teachers are usually more concerned about the surface content, such as the progress and completeness of the class, and it is difficult to give feedback by focusing on the inner changes of students from the perspective of emotion. So this is one of the dimensions of feedback literacy that pre-service English teachers need to develop.

4.2.5 Effects of Educational Practice on Improving Teachers' Feedback Literacy

The pre-service stage is the first stop of a teacher's career. At this stage, teacher feedback literacy can be improved in various ways. All the interviewees mentioned that they communicated with their internship mentors about how to provide feedback to students, and also consulted relevant materials to make adjustments.

Educational practice provides a valuable opportunity for exchange between pre-service English teachers and experienced in-service teachers. In addition, according to the results of the questionnaire survey, the overall teacher feedback literacy of pre-service English teachers increases with the extension of the practice duration, which also indicates that, to a certain extent, in-depth educational practice can improve the feedback literacy of pre-service English teachers, and properly extending the duration of educational practice has certain benefits for the feedback improvement of pre-service English teachers.

5. CONCLUSION

This chapter focuses on four parts. The first part summarizes the finding of the first four chapters. The second part presents the pedagogical implications of the study's findings for development of pre-service English teachers' feedback literacy. The third part addresses the limitations and the suggestion for future research of this study.

5.1 Major Findings

Based on the above analysis, the current research investigated the feedback literacy of pre-service English teachers who just finished educational practice. Now, this chapter will revisit the research questions of this study:

- What are the characteristics of pre-service English teachers' feedback literacy?

Results indicate that feedback literacy of pre-service English teachers is at the upper-intermediate level. However, there is still much room for improvement in emotional feedback and feedback capability, especially the capability of technology application.

The pre-service English teachers have certain cognition of feedback literacy, but have not enough ability to realize the theory in the practical class. They can give feedback to the students, but few, blunt and immature, with incoherent feedback awareness.

Besides, pre-service English teachers have abundant opportunities to seek feedback advice, especially for who are in the practice. So educational practice is an important way to improve teachers feedback literacy for pre-service English teacher.

- What factors affect the feedback literacy of pre-service English teachers?

Cognitive dimension, ability dimension and affective attitude dimension are the three main dimensions of teacher feedback literacy, the overall teacher feedback literacy is largely determined by the combined effects of them.

The independent variables of the questionnaire “gender”, “educational background”, “type of practice school”, “practice duration” all have no significant difference on the overall teacher feedback literacy of pre-service English teacher. However, according to the results of the “Table 5”, we can conclude that overall teacher feedback literacy level of pre-service English teachers increases with the practice duration, and decreases with the grade level of the practice, which means that “type of practice school” and “practice duration” has subtle effects on teacher feedback literacy because of some objective factors.

Furthermore, the test-oriented system, class size, limited feedback strategies, all of them become factors that affect feedback literacy.

5.2 Pedagogical Implication

The six-factor model of the conceptual connotations of teacher feedback literacy has implications for cultivating and developing of pre-service English teacher. Based on this model, combined with the findings of the study, some pedagogical implications are proposed as follows:

Firstly, the improvement of feedback literacy ability of pre-service English teachers should start

with practice. The feedback cognition of pre-service English teachers is in the upper levels, but in the process of educational practice, they all found that there were still many shortcomings in their feedback literacy. Therefore, only when pre-service English teachers really step up onto the platform can they find problems and improve themselves. In addition, the opportunity for classroom observation and communication with seniors is very valuable and plays a great role in the improvement of teacher feedback literacy. Therefore, it is very important to extend the duration of educational practice appropriately and improve the depth and breadth of educational practice for pre-service English teachers.

Secondly, pre-service English teachers should pay attention to the improvement of feedback ability. Teachers feedback literacy determines whether feedback can work in learning promotion, and feedback ability is an essential part of teachers feedback literacy. In the design of feedback, comprehensiveness and diversity of feedback activities deserve attention, and students’ participation and understanding should be taken into consideration. In the technology use, pre-service English teachers get significantly lower scores, so they should consciously improve the ability of technical feedback, for example, providing students with individually targeted feedback information through software analysis of student achievement, recording feedback information into video and sending it to students. These can effectively enhance the efficiency of feedback. In addition, teachers should concern about the maintenance of teacher-student relationship in the feedback process, being tolerant to each student and focusing on students’ emotion.

Thirdly, in the educational practice stage, pre-service English teachers will be slightly anxious, unable to spend class time in providing feedback, so that the feedback to students is only superficial. In order to overcome this problem, pre-service English teachers can use a variety of methods to implement feedback, such as providing personalized feedback because of individual differences of students, providing feedback according to students’ responses, and appropriately using one-to-one feedback.

5.3 Limitation and Suggestions for Future Research

It should be noted that there are some limitations in this study. First of all, the sample size

is not large. Due to the influence of experimental factors, the proportion of gender and the grade is unbalanced. Secondly, due to the factors such as time and manpower, the object of this study is relatively single, and the object of investigation is concentrated in the same university. Therefore, the conclusions are with limitation.

As a frontier issue of academic circles, the study of teacher feedback literacy entail more expanded information. In the study of pre-service English teachers' feedback literacy, future research can obtain more data through student survey and classroom observation in order to enrich the study, and provide more strategies for feedback literacy development of pre-service English teachers.

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