Research on the Status-quo of Language Teacher's PCK for Reading Instruction

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ABSTRACT

The key to deeply understand the intrinsic nature of language teachers' reading instruction is to understand their Pedagogical Content Knowledge (PCK). Based on Wang Rongsheng's 9-level progressive criteria for the content of reading instruction, this study has designed a questionnaire for teachers' PCK and an interview outline. The study has found three types of problems: teachers' lack of understanding of students' cognition, lack of obvious genre-based design features, and insufficient teacher training. As a result, teachers are required to improve their teaching literacy in 3 aspects: problem-based curriculum design, teaching evaluation and feedback as well as pre-service and in-service training.

Keywords：*PCK, Language Teacher, Reading teaching, Teaching literacy*

1. INTRODUCTION

In the field of language teaching research today, ideological and political education together with labor education have gradually been included in the Chinese language classroom and become the hot topic of the moment. Through comparison and analysis of the literature, it is found that the five modules of the curriculum, namely literacy and writing, reading, writing, oral communication and integrated practical activities, are all developing vigorously. Related studies on the reading module in secondary schools include approaches like group reading, the-whole-book-based reading, unit reading, etc. This kind of reading module cites task clusters as a unit and interpret texts from multi-angles, which serves as an essential direction in language teaching studies.

Research on teachers' PCK can reveal the essence of teachers' knowledge composition and provide direction for language reading and teaching research. Focusing on the current situation of PCK research at home and abroad, language teachers have encountered less efficient results in reading instruction in the teaching process despite their master of knowledge and theories of language literature as well as their understanding of techniques in modern classes. Many teachers focus on the theoretical aspects of their research, but lack research on methods, assessment and influence factors of practicing various reading texts. As a result, they still feel lost in the teaching of reading texts and students gain little in the class. The key to a deeper understanding of the intrinsic nature of reading instruction also lies in understanding their PCK.

Therefore, this thesis studies on existing problems of language teachers' PCK for reading instruction so as to provide useful reference for enhancing their reading instruction.

2. LITERATURE REVIEW

As a pioneer in PCK studies, Schulman introduced the concept of PCK in 1986 and redefined it in 1987. According to him, PCK is the integration of subject knowledge and pedagogical knowledge, emphasizing that teachers should organize specific topics, problems and events according to learners' interests and abilities[1-2]. Besides, through appropriate teaching methods, they should present specific knowledge to specific students.

Based on Schulman's research, Grusman (1994) divided PCK into four aspects: subject knowledge, students' knowledge, curriculum knowledge, and pedagogical knowledge[3]. Subsequent studies on PCK are more based on Schulman's theory and have been expanded in relation to different research perspectives. For example, scholars Magnusson, Kajcik, and Borko (1997) analyzed PCK from a constructivist

perspective[4]; Virginia Welter & Ute Harm (2018) made use of the theoretical components of PCK to construct an instrument for measuring PCK[5]. Alonzo & Kim (2016) assessed teachers' professional level by video editing[6]. They evaluated teachers' PCK by requiring teachers to answer questions after watching a certain teaching video. PISA (Program for International Student Assessment) provides a new research perspective on language teaching by setting up a 7-level reading proficiency scale (1a,1b,2,3,4,5,6) to establish a correlation between literacy levels and task performance, which provides a basis for the theoretical framework for teachers' PCK from the perspective of students' cognition[7].

Currently, there is no PCK measurement tool related to language reading instruction in China, but the 9-level evaluation scale for teaching content proposed by Wang Rongsheng (2007) of Shanghai Normal University has high significance for teaching content evaluation[8]. Relevant studies on PCK by domestic scholars involve several aspects such as core connotation, PCK framework, and assessment model. Li Weisheng (2012) identified the core connotation of PCK for subject teaching, emphasizing that the core connotation lied in transforming subject knowledge into a form that meets the purpose of teaching[9]. In addition, he suggested that it was based on students' standpoint to transform knowledge and cultivate students' thinking ability. Dong Tao (2017) used the PCK structural framework to guide and analyze class cases[10]. Also, he analyzed teachers' PCK types through class observation. By doing so, he believed that the difference between preconceptions and generation of class, teachers' knowledge of curriculum, accumulation of teaching experience, pre-class preparation and post-class reflection exert an impact on students' understanding of knowledge.   Relying on Koch's four-level training assessment model, Zhang Zhijun and Wang Jin (2018) developed a PCK training efficacy assessment scale for preschool teachers, suggesting that building teachers' learning communities, focusing on situated instruction, applying implicit knowledge, and improving the ability to design activities are the keys to developing PCK[11].

With the literature review from the above two aspects, we summarize as follows: (1) Domestic and international research on PCK is mostly based on Schulman's viewpoint, which emphasizes the transformation of "subject knowledge" from the perspective of promoting students' learning and understanding. (2) The ultimate focus of reading

instruction of the Chinese language is to change teachers' teaching styles in order to promote reforms in students' learning approaches and enhance their reading skills.

3. RESEARCH DESIGN

3.1. Research content and targets

The author attempts to build a bridge between language teachers' professionalism and pedagogy by investigating the current situation of teachers' PCK for reading instruction from the perspective of text categories and analyzing the related influence factors in order to improve teachers' text interpretation techniques and enrich teaching design. In this study, 18 language teachers from five middle schools in Xiamen are selected as the respondents.

3.2. Research Methods

This study mainly adopts three methods: literature research, questionnaire, and interview. Using literature research, we have reviewed and sorted out PCK-related literature, analyzed the status-quo of research on PCK at home and abroad as well as defined the connotation and composition of reading instruction PCK in order to provide theoretical support for this study. The questionnaire and interview methods are applied to collect data on the current teaching status and sources of problems related to reading teachers at different stages of secondary schools in Xiamen.

4. RESEARCH DIMENSIONS AND DESIGN OF TOOLS FOR READING INSTRUCTION PCK

4.1. Theoretical basis

This study cites Wang Rongsheng's 9-level progressive criteria for reading instruction content (as shown below) as the theoretical basis for evaluation. Compared with PISA, this evaluation criteria combines requirements of the new curriculum reform in China. Based on the state-compiled textbook, it analyzes the class content from the perspective of teachers' instruction, which is in line with the actual reading teaching in China. This evaluation criteria is widely used in many Chinese provinces and cities, such as Shanghai, Fujian, Nanjing, etc. It has won the consensus of experts and front-line teachers and has a certain degree of validity.

Table 1. Progressive evaluation criteria for reading instructional content

Level	Continuous examination of content
Level 9	instructional content is relevant to students' actual needs
Level 8	instructional content is consistent with the objectives of the Chinese language curriculum
Level 7	instructional content is consistent with the content students have learned
Level 6	what is expected to be taught is consistent with what is actually being taught
Level 5	instructional content is consistent with academic understanding
Level 4	instructional content is consistent with the norm of listening, speaking, reading, and writing
Level 3	instructional content is relatively focused
Level 2	instructional content is related to the Chinese language
Level 1	teachers are aware of what they are teaching

4.2. Design of Questionnaire

The questionnaire consists of three parts. The first part is background information with five questions to record the teaching age, educational background, and title of the interviewees. In this study, teachers are classified into three categories: novice teachers, intermediate teachers, and senior teachers. Teachers with the title of assistant teacher and with teaching experience varying from 0 to 5 years are called novice teachers. Those with the title of senior and more than 15 years of teaching experience are senior teachers, and those in between are intermediate teachers. The second part of the test consists of three questions that examine teachers' concepts of language curriculum compilation and their mastery of course design, which are part of the "Knowledge of Language Curriculum and Materials".

The third part of the course is divided into four main categories from a literary perspective, including prose, classical Chinese, novel, and practical text. The questions are designed with reference to Wang Rongsheng's 9-level progressive evaluation criteria, in which Wang divides the class into four levels according to the 9-level evaluation criteria: the lowest standard (level 1, 2, 3), the lower standard (level 4, 5), the higher standard (level 6, 7), and the ideal standard (level 8, 9). For each of the four types of writing, two questions are set for each standard with a total of 32 questions.

4.3. Design of Interview Outline

The interview method centers on semi-structured interviews. 10 questions are included in unstructured interviews with teachers at different stages regarding the absence of the components of PCK in reading instruction and the influence factors. Based on the interview outline design, the language teachers' expertise consists of four aspects: subject knowledge, instructional design, instructional implementation, and instructional evaluation. According to Wang Rongsheng's 9-level progressive evaluation criteria, subject knowledge mainly involves lower-level criteria, while the latter three mainly involve higher-level criteria.

4.4. Efficacy Examination of Assessment Tools

This study adopts expert review to enhance the validity of the assessment tool. A professor of Chinese language curriculum and pedagogy is invited to review the assessment tool. According to the expert, the direction and overall framework of the assessment tool are reasonable. The expert also points out that reading instruction is dependent on students and should improve students' core literacy. Therefore, the author has revised this issue by highlighting the status and role of students in the questionnaire. At the same time, the expert suggests that PISA could be referred to in teaching strategies.

5. ANALYSIS OF THE RESEARCH RESULTS

The author applies this questionnaire to 18 Chinese teachers in 5 schools in Xiamen, and 18 valid questionnaires are collected. After analyzing the results, one junior, one intermediate and one senior teacher are randomly selected to be interviewed for the current situation of reading instruction in Xiamen secondary schools. Besides, the author also evaluates and analyzes the teaching content of teachers with different titles from the perspective of text genres.
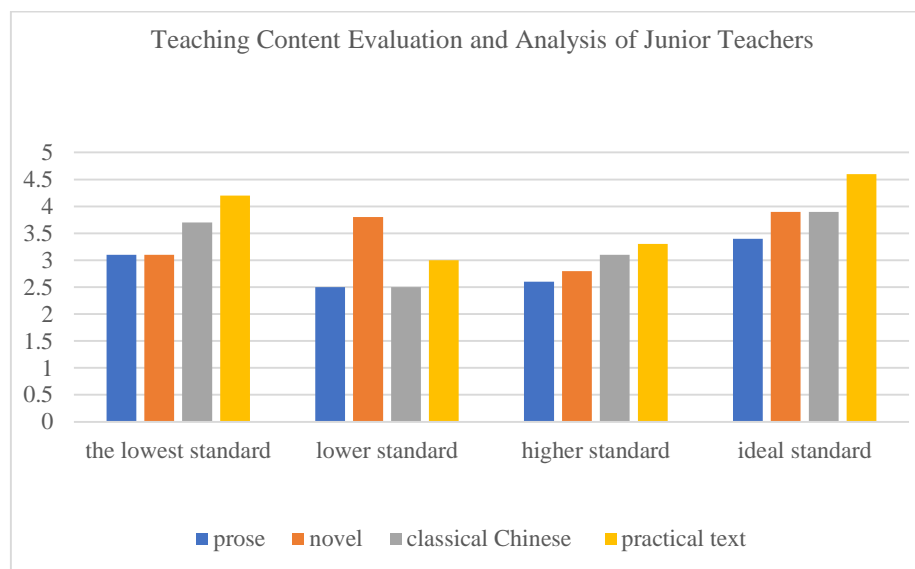

Figure1. Teaching Content Evaluation and Analysis of Junior Teachers

Based on the analysis from the figure1, we can draw the following conclusions: (1) In terms of the lowest standard, junior teachers are weak at the teaching of prose and novel, with unreasonable design of prose teaching links and poor relevance of novel teaching contents to teaching objectives. (2) In terms of lower standard, junior teachers are less capable of the teaching of prose, classical Chinese and practical texts, mainly due to the confusion of teaching methods for various genres and the failure to adopt appropriate teaching methods. (3) In terms of higher standard, teachers are less adequate at the teaching of prose and novel mainly because students are more concerned with the scenes in prose and the plot of novels. Meanwhile teachers neglect students' feelings and appreciation of prose and their mastery of reading novels. (4) In terms of ideal standard, all genres are at a high level except for prose, especially practical literature, which is best applied by students in their lives.
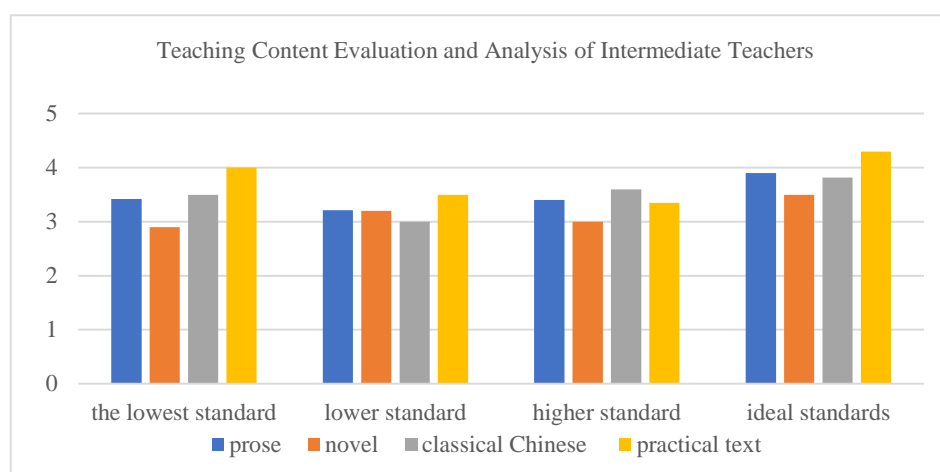

Figure 2. Teaching Content Evaluation and Analysis of Intermediate Teachers

The analysis from the figure 2 shows that (1) Generally speaking, intermediate teachers are better than junior teachers in each genre. Although there are no obvious shortcomings, teachers have various instructional literacy. (2) In the lowest standard assessment, some intermediate teachers still repeatedly teach students the knowledge of novels they have already mastered, and class time is not used efficiently.

(3) In the lower standard assessment, some intermediate teachers cannot apply correct teaching methods, and they also get confused with teaching methods of different genres. (4) In the higher standard assessment, most intermediate teachers are able to teach according to the genre of novels, while students focus more on the plot and neglect reading methods (5) In the ideal standard assessment, some intermediate teachers design prose teaching links effectively, which serves as a big improvement compared with junior teachers.
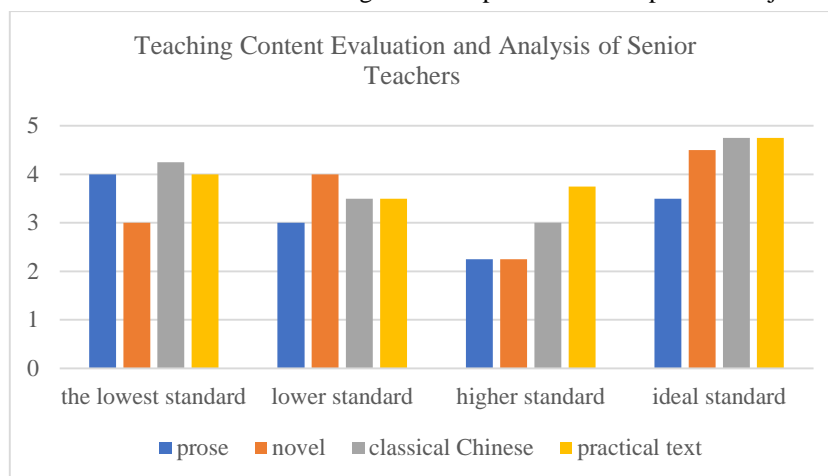

Figure 3. Teaching Content Evaluation and Analysis of Senior Teachers

We can draw the following conclusions based on the above figure3: (1) Overall, senior teachers perform significantly better than intermediate and junior teachers on different levels of assessment. (2) In terms of the lowest standard, senior teachers still teach what students already know about novel. (3) In terms of higher standards, they are relatively inadequate at teaching novels and prose, occasionally assimilating and substituting their own experience for that of the author as well as overlooking the genre of novels. (4) In terms of ideal standards, novels, classical Chinese and practical texts are at a higher level. Based on the learning situation, teachers focus on the students' ability to master and apply their knowledge.

To sum up, the status-quo of reading teachers' PCK in secondary schools can be summarized as follows: (1) In general, teachers' PCK is largely in positive correlation with teaching experience and title. Prose is a difficult part for teachers at all stages. Most junior and intermediate teachers have little awareness of teaching various genres and are confused to various degrees about teaching methods for those genres. While the teaching of practical texts is more effective thanks to their close relevance to students' life. (2) In terms of the lowest standard, junior, intermediate and senior teachers have gradually improved their teaching of prose, but in terms of teaching novels, they repeatedly explain what students have already mastered, resulting in low classroom efficiency. (3) In terms of lower standard, students have a poor mastery of prose and classical Chinese, and some junior and intermediate teachers' prose instruction highlights abstract "ideas" and "spirit"[12]. However, for the teaching of classical Chinese, teachers at all stages repeatedly explain translation and shift the focus of teaching. (4) In terms

of higher standard, all teachers have encountered ineffective teaching of prose and novels, because students aren't clear about the learning objectives of various genres and lack a clear understanding of key learning contents. (5) In terms of ideal standards, prose instruction is relatively weak compared to other genres. The teaching links of all teachers are often independent from the text. As for classical Chinese instruction, senior teachers lay more emphasis on cultural inheritance than exam skills preferred by some junior and intermediate teachers.

6. DISCUSSIONS AND SUGGESTIONS

6.1. Problems in reading instruction

6.1.1 Teachers' insufficient understanding of students' cognition

The survey reveals that teachers have difficulty grasping students' cognitive levels, making it difficult to determine when to start and finish teaching. Students' pre-conceptions exert influence on teachers' design, implementation, and evaluation of instruction. What're more, students' life experiences and cognitive levels influence students' understanding of reading content and affect the achievement of instructional objectives. Therefore, if teachers lack a grasp of students' learning situation[13], they will find it difficult to improve students' reading skills through reading instruction.

6.1.2 Implicit genre-based features of instructional design

Most Chinese junior and intermediate teachers teach reading at a superficial level, and some of them do not

have a deep enough understanding of the goals of teaching various genres. As a result, genre-based features are weakened in their teaching. For example, in prose instruction, no matter what genre it belongs to, many teachers adopt overall perception, key paragraph analysis, and words speculation. However, since there are narrative, lyrical, scenic and philosophical prose etc., text interpretation should be in accordance with different features.

6.1.3. Inadequate training for teachers to support their literary development

On the basis of the analysis of the questionnaires, there is little difference in the scores of teachers with different educational background. The interviews reveal that the degree requirements for teachers' admission in China have been improving year by year, and many first-tier cities require graduate degrees. The interviewed teachers generally believe that pre-service education does not play an obvious role, and the pre-service training structure for teachers is not perfect. So teachers' expertise is mainly accumulated and cultivated at work, but there is also a lack of quality in -service training.

6.2. Strategies for improving reading literacy

Reading is the foundation for all subjects and is an important support for facing and solving social problems. Drawing on the PISA reading literacy framework, this study makes the following recommendations for reading instruction:

6.2.1 Reading instruction should base on question design and text genres

The purpose of reading instruction is to provoke students' thinking and improve reading literacy. First, teachers should clarify the effects to be achieved in class and set questions with relevance according to the level of questions[14]. In addition, combining PISA, teachers are required to enable students to gradually solve questions of different tasks and develop corresponding reading skills. Secondly, based on genres of texts, teachers should guide students to learn to read related texts and expand their advanced thinking in dealing with complex texts. Finally, teachers should try to ensure the consistence between the expectation and generation of instructional design, and fully consider all possibilities in advance in order to achieve the teaching objectives[15].

6.2.2. Teaching evaluation should accord with both social and individual needs

Teachers should focus on the effectiveness of assessment in the teaching process and use assessment to stimulate students' interest in learning. At the same time, teachers should pay attention to students' learning process and changes in their emotions, attitudes and behaviors. Firstly, through questions and assessment, teachers can cultivate students' advanced thinking and enhance their cognitive ability so that they can better adapt to future social development[16]. Secondly, teachers are supposed to focus on reforming education evaluation. National College Entrance Examination (NCEE) is the baton for subject teaching. The direction of NCEE influences the teaching direction, which is expected to meet the social and examinees' needs and highlight the orientation of education[17].

6.2.3. Strengthen pre-service and in-service training for reading teachers

On one hand, in pre-service training, the curriculum needs to be optimized[18], and courses related to psychology of language teaching should be set up to facilitate pedagogical trainees' mastery of students' psychology of language learning. Besides, the internship model for those trainees and the training model for new teachers should be improved. Also, a mentor-based system should be established for off-campus internship teachers. Additionally, interns should be more engaged in teaching, which serves to enhance their capability to research and analyze language textbooks. On the other hand, during in-service training, we should take full advantage of open classes, academic conferences, teaching contests, research projects and other activities to encourage teachers to participate actively and improve their teaching skills and effects.

7. CONCLUSION

Reading instruction involves a wide range of aspects, including pedagogy, psychology, philosophy, etc. Language education and teaching is immature compared to other disciplines and is still in the exploration stage. So we are required to enrich each module in order to provide reference for teachers' reading instruction and students' reading study as well as to promote students' personal development. This thesis has made some exploration in the status-quo and evaluation of teachers' PCK, but still needs adequate research to support this field. In particular, in terms of teaching evaluation, the actual teaching is still dominated by subjective assessment. And how to give full play to the feedback and diagnostic function of evaluation on teaching is the focus of future research.

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