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Developing EFL teachers' pedagogical content knowledge for teaching spoken English in Chinese universities

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ABSTRACT

While previous research has explored the constituents and attributes of pedagogical content knowledge (PCK) possessed by teachers in the general education field, there is a noticeable gap in the literature regarding the development of PCK among EFL-speaking instructors in the Chinese university context. This study aimed to examine how four EFL teachers developed their PCK for teaching speaking-related courses over one year in Chinese universities. The study utilized a narrative case study design where the data were gathered from the participants' narrative frames, interviews, observation and relevant documents. The findings indicate that PCK development was influenced by various personal and contextual factors, which were observed to follow two distinct trajectories. One pathway involves examining literature and reference materials and synthesizing knowledge through personal interpretation. The other pathway entails acquiring the PCK from fellow teachers or transferring it from different courses, then augmenting this knowledge through self-evaluation and introspection. This study identified three models of PCK development, including the trial-based model, top-down model, and inquiry-based model, which exhibited a progressive and evolving nature. The findings suggest that on-the-job practice and self-reflection are crucial in developing PCK. It also yielded valuable insights into the strategies employed by EFL teachers to adapt and improve their teaching effectiveness amidst curricular reforms in China, and internationally. Providing enhanced pre-service education and policy-level support to EFL-speaking instructors is advisable to promote the sustainability of their professional development.

Keywords: Language awareness; pathways of PCK development; pedagogical content knowledge; reflective practice; teaching spoken English

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INTRODUCTION

Pedagogical content knowledge (hereafter PCK) has garnered significant scholarly interest in the field of education since the 1980s (Djulete, 2021). PCK entails the integration of content and pedagogy to comprehend the organization, adoption, and representation of specific subject matter for instructional purposes (Shulman, 1986). PCK impacts instruction quality and student learning. Much research focuses on the characteristics or

components of PCK (Sarıçoban & Kırmızı, 2020; Wu et al., 2019). The research on the development of PCK primarily concerns utilizing one or several resources, such as a training program (Reza Adel & Azari, 2023) or expert guidance (Shi et al., 2022), within a specific timeframe. Nevertheless, developing EFL teachers' PCK under naturalistic conditions in their long-term careers remains under-researched under the Chinese university context. Guo (2019) argues that research on teacher

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development in China lacks solid conceptualization and rigorous methodologies. EFL teachers' PCK development pertaining to speaking instruction remains even underrepresented in the Chinese university context. According to Nation and Newton (2020), teaching L2 speaking is a largely neglected skill in the second-language field, which could partly explain the scarcity of research in this area. Different language skills necessitate distinct PCK (Cheung & Jang, 2020). The real challenge is to understand the process of knowledge development related to speaking instruction and to identify the specific experiences that contribute to these transformations (Gomez, 2020). How EFL speaking instructors acquire and construct their knowledge is thus a major concern for teacher educators and policymakers.

In China, the emphasis on students' oral proficiency has led to various stages of curricular reforms. University teachers must promote students' competencies in oral interaction, expression, description, and argumentation (Ministry of Education, 2018). Courses on spoken English are suitable for these purposes and their inclusion in the new course setting is a compulsory requirement for students majoring in English and an elective option for non-English majors. In the new course setting for spoken English in China, a comprehensive curriculum has been developed that integrates oral communication, public speaking, and topical debates. The conference "Oral English Teaching and Cultivating Students' Critical Thinking Ability", which took place in 2010, identified two modules for teaching spoken English within the course structure: "interpersonal communication" and "public communication" (Gong, 2012, p. 117). The first module, oral communication courses, focuses on everyday interactions. The second module incorporates public speaking and English debate courses. Public speaking courses aim to equip students with the skills to express their ideas publicly, share perspectives, and influence others (Lucas, 2023). On the other hand, English debate courses concentrate on instructing students on effectively addressing and considering multiple views on a given issue. Debaters present arguments in favor of or against a particular topic or engage in discussions. This research investigated the development of PCK in all three types of speaking courses.

This qualitative narrative case study examined four EFL teachers' PCK development of instructing speaking courses for over a year. The four selected participants were chosen for their representativeness, as they provided a diverse range of perspectives. They were employed at different higher education institutions in mainland China. They were either unfamiliar with the new instructional context or ill-equipped with the subject knowledge of newly implemented speaking courses.

Thus, mobilizing their skills and abilities to deliver the subject matter comprehensibly is a challenge. They are required to reconstruct their previous knowledge in a new context, allowing the authors to delve into how they form and change their PCK. The collected data included narrative frames, teacher interviews, classroom observations, and relevant documents.

This study aims to acquire a comprehensive understanding of the concept of PCK and the process through which EFL teachers cultivate their PCK within the context of Chinese tertiary-level education. It holds particular importance in probing the transference and integration process related to PCK development. Additionally, it contributes to enhancing both local and global understanding of effective classroom teaching and ultimately facilitates the professional development of EFL teachers.

Concepts of Pedagogical Content Knowledge

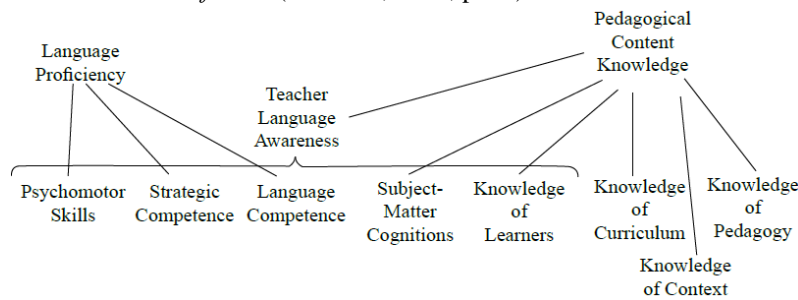
Shulman (1986) proposed a missing paradigm, highlighting a lack of emphasis on PCK, a crucial area of research as it delineates distinct knowledge domains for effective teaching. PCK involves the amalgamation of subject matter and instructional strategies to comprehend how challenges or concerns in a specific subject are structured, conveyed, and tailored to accommodate learners' varied interests and capabilities and subsequently presented for instructional purposes.

Shulman's definition of PCK offers crucial guidelines for developing PCK across different subjects but does not emphasize its dynamic nature. Dynamic perspectives focus more on viewing teachers as unique individuals situated within diverse contexts. According to Park and Oliver (2008), PCK involves teachers' understanding and implementation of instructional strategies, representations, and assessments to help students comprehend specific subject matter. This understanding also considers the contextual, cultural, and social limitations of the learning environment, thus highlighting the dynamic nature of PCK.

In the EFL/ESL field, the significance of the language component within the PCK framework has been emphasized. Tsui and Nicholson (1999) have highlighted the importance of English language proficiency as a distinguishing factor in language teachers' PCK and their subject matter knowledge. Andrews (2003) has put forth a model that posits language awareness among EFL teachers as a connecting link between language proficiency and PCK (Figure 1). This model suggests that language awareness is a critical element of language teachers' PCK and plays a crucial role in the selection of appropriate instructional materials for language teaching.

Figure 1

Andrew's model of PCK (Andrews, 2003, p. 91)



Since Andrew introduced the language aspect into the PCK framework, there has been a significant emphasis on the importance of language as a crucial component of teachers' knowledge base (Jiang, 2022). However, these models do not provide sufficient guidance on how teachers can acquire PCK, which limits the practicality in the real teaching practices. Despite their significant differences, there is a lack of differentiation among distinct language skill domains, namely reading, writing, listening, and speaking. As a result, there is a scarcity of research exploring PCK for instructing

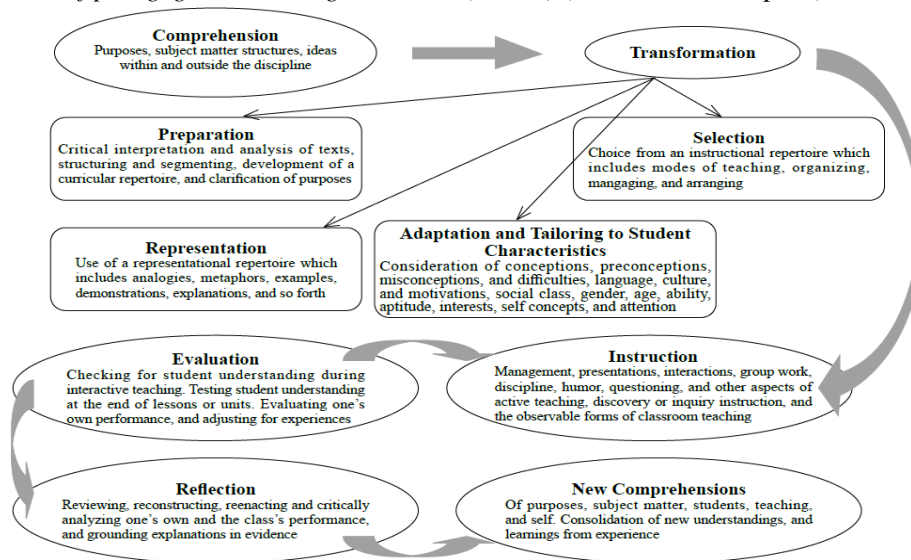
a sequence of speaking-related courses at the tertiary level.

Development of Pedagogical Content Knowledge

Extensive scholarly research has been undertaken to investigate the development and resources of PCK among in-service teachers. Fernandez (2014) has delineated the developmental process of PCK and presented a representation of pedagogical reasoning and action, accompanied by a cyclical model facilitating teacher reflection and subsequent implementation of actions (see Figure 2).

Figure 2

Model of pedagogical reasoning and action (MPRA) (Fernandez, 2014, p. 82)



This model integrates teachers' subject matter knowledge with methodological approaches, thereby providing a theoretical basis for teachers' PCK development. Pedagogical reasoning and actions link the cyclical steps of knowledge comprehension, transformation, instruction, evaluation, and reflection. Teachers' ongoing process of comprehension and reflection is integral to their PCK development, enabling them to achieve coherence and alignment between their knowledge and practice (Lyu et al., 2021). The developmental pathway provided guidance for EFL teachers in forming and developing their PCK.

In the Chinese university context, many EFL teachers strive to empower themselves in order to mitigate the effects of marginalization in the university settings and intentionally choose to develop their PCK. Some studies (Li et al., 2021; Shi et al., 2022) have utilized qualitative case studies, employing interviews and classroom observations as the primary methods for data collection. The utilization of qualitative methods can provide a more comprehensive and nuanced understanding of the development of EFL teachers' PCK. The findings suggest that a range of individual and contextual factors influence the development of

teachers' PCK. Among the personal factors, teachers' practical experiences, reflections, beliefs, agency, individual characteristics, and emotional attributes have been identified as significant sources (Han et al., 2021). PCK is also subject to the influence of contextual factors, such as establishing effective communication and collaboration with colleagues, the school policy, as well as teacher education programs (Li et al., 2021). Attending competitions and seeking expert opinions are also considered valuable catalysts for EFL teachers (Hirpa et al., 2023).

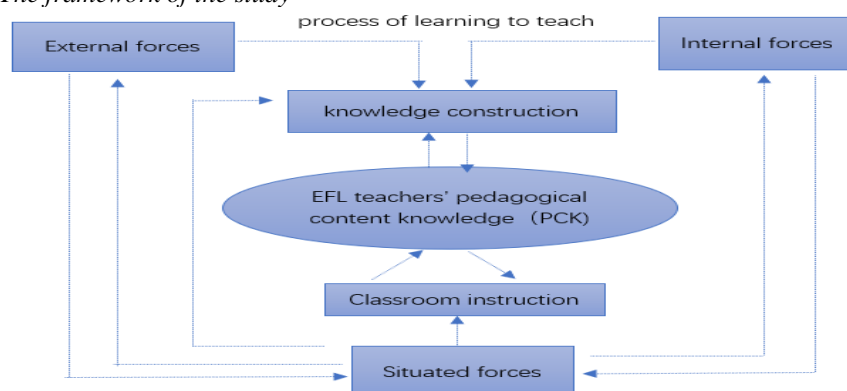
Thus, this study aims to explore the factors that impact the development of PCK among EFL-speaking instructors in the Chinese tertiary education context. Additionally, it examines the different pathways through which their PCK develops in response to various situational, internal, and external forces. The contribution aids in enhancing both local and global understanding of EFL teacher development and PCK in speaking instruction.

Framework

To guide this study, a conceptual framework was created based upon the above literature (see Figure 3). EFL teachers' PCK directly influences how they design and implement their classroom instruction. The development of PCK is a dynamic process involving the continuous construction of knowledge, requiring ongoing learning. In the framework, dotted arrows signify that the considered processes are not readily observable and require further examination within the study. Various external, internal, and situational factors influence the process of PCK construction. External factors encompass the contextual elements of the school, whereas internal factors pertain to the attitudes, emotions, and motivation of teachers. The situational forces that exist within the classroom teaching environment also exert a substantial influence on this process. Therefore, the factors that significantly impact the development of their PCK are also probed.

Figure 3

The framework of the study



Research Questions

The following research questions guided this study.

- 1) What are the key factors influencing four EFL-speaking instructors' PCK development?
- 2) How do the four EFL-speaking instructors develop their PCK?

METHOD

A narrative case study was employed to examine teachers' PCK development. Utilizing case studies in research can lead to more reliable and comprehensive findings (Hancock et al., 2021). An inherent benefit of engaging in case studies is to "increase generalisability, reassuring researchers that the events and processes in one well-described setting are not wholly idiosyncratic" (Miles et al., 2020, p. 95). This study employs a qualitative approach to gather narrative data from individuals within a single research project. Clandinin (2019) asserted that narrative inquiry functions as a

methodology for understanding lived experiences. It involves a collaborative process between a researcher and participants situated within particular locations and social contexts over a prolonged duration. The strength of a case narration lies in its utilization of primary "raw" data rather than secondary interpretive data, thereby preserving the qualitative nature of the narratives (Shkedi, 2005). This approach involves collecting a wide range of case narratives, organizing them into clusters of categories, and conducting cross-case analysis to facilitate generalization among different cases.

By employing this narrative case study design, this study was able to effectively examine the development of PCK among EFL-speaking instructors in Chinese universities. This study's primary data collection method was through interviews, during which the participants were encouraged to provide detailed reflections. These interviews facilitated the construction and articulation of autobiographical accounts by the

participants, shedding light on their experiences, the development of PCK, and the factors that influenced their PCK development.

Selection of Participants

Purposeful sampling involves the deliberate selection of participants or data sources for a study based on their potential to provide valuable and pertinent information in relation to the research questions (Miles et al., 2020). After conducting interviews with ten EFL-speaking instructors regarding their teaching practices and their willingness to partake in the study, I selected four participants who were deemed most representative as they offered a diverse range of perspectives. They worked at different universities of different tiers in

mainland China. They had varied backgrounds and held differing beliefs and attitudes toward the instruction of speaking skills. Their expertise reflected the diversity, as they taught various speaking courses such as oral communication, public speaking, and English debates. Two of the participants are native English speakers, while the other two are Chinese EFL teachers. They all signed an informed consent statement before joining the study and were assured that all data would be utilized solely for research purposes, with confidentiality being maintained. The study was carried out in compliance with the Research Ethics Committee (REC) of the authors’ affiliated universities. Their biographical information is provided below (see Table 1).

Table 1
Biographical information of the participants

Name of the teacher (pseudonyms)	Cynthia	Richard	Mr. Xu	Ms. Shi
Nationality	American	Canadian	Chinese	Chinese
Ranking of the university	Tier 2	Tier 2	Tier 3	Tier 2
Years of teaching speaking-oriented courses	15	8	4	10
Educational background	Master’s degree in ESL	Master’s degree in International Relations	Ph.D. degree in English Translation	Master’s degree in Applied Linguistics
Teaching courses	Oral communication	Oral communication	Public speaking	English Debate
Target students	Year two English majors	Year two non-English majors	Year one non-English majors	Year Three English majors

Data Collection

The data collection for this narrative case study lasted for a period of one year. To guarantee the reliability and validity of the data, a triangulation approach was employed, which involved the use of semi-structured interviews, narrative frames, field observations, and various documents (see Table 2). With their informed consent, the first author conducted formal or informal interviews with the teacher participants to gather their personal stories and understand how they develop and modify their PCK. Several interview questions include: What are the key events or individuals that have influenced speaking instruction? How was this speaking course organized at the outset? Are there any differences compared to the present time? What were the reasons for these changes to occur?

Furthermore, the narrative frame technique, as described by Hancock et al. (2021), was utilized to collect perspectives on their professional

experiences. In this study, participants were asked to complete a narrative frame in their preferred language. These frames provided a structured framework for participants to reflect on their experiences and develop a narrative account, as designed by the authors. Participants were also encouraged to provide detailed reflections. Through narrative frames, participants could produce autobiographical accounts of their experiences in developing their PCK for teaching EFL-speaking courses. Follow-up interviews aimed to identify any missing information and establish further communication with the teachers via email or WeChat to supplement the data and gain a deeper understanding of their experiences. Validation strategies were utilized to ensure data saturation, including prolonged engagement and persistent observation, triangulation of data, and member checking.

Table 2
An overview of the data collection process

Teacher participants	Formal interviews	Documents
Cynthia	Three times (81 minutes)	Narrative frames, classroom observation
Richard	Three times (90 minutes)	Narrative frames, syllabus, classroom observation
Mr. Xu	Three times (83 minutes)	Narrative frames, syllabus, classroom observation
Ms. Shi	Four times (125 minutes)	Narrative frames, syllabus, classroom observation

Note: I-interview; N-narrative frames; O-class observation; S-syllabus.

Data Analysis

The data analysis process for qualitative study possesses distinct features that are mutually influencing, overlapping and synchronistic (Miles et al., 2020). Data analysis was a spiraling and continuous process in this narrative case study. The authors employed an iterative data analysis process instead of adhering to a rigid linear approach. The data analysis procedure for this study encompassed four key stages: transcription, coding, thematic analysis, and interpretation.

After conducting the teacher interviews, the first author generated texts for analysis and manually analyzed the data. The recordings were transcribed, and memos were written based on interview reflections. In the study, the transcribed texts from the interviews were sent to the four participants via email for confirmation, a process known as member checking. Then, appropriate categories were established based on coding, and distinct themes and patterns in the data were identified. When researchers analyzed a data set, they tended to organize it by creating cohesive narratives that revolved around core categories. This

practice enables researchers to provide more accurate descriptions of their findings, resulting in a more focused categorization (Shkedi, 2005). In generating core categories, the first author searched for categories that can create coherent narratives, which seem to be the key focus or issues of the participants, frequently appearing in the data, and easily associated with other categories. Then, the first author condensed the themes and depicted them in depth.

During the coding process, the collected data were systematically assigned serial numbers to facilitate referencing. For instance, the notation “I-1” indicates the first interview, “N” refers to the narrative frame, and “S” pertains to the teaching syllabus. The data were thoroughly examined to identify instances that exemplified the influencing factors of PCK development as outlined in Research Question 1, as well as instances that demonstrated PCK developmental paths as outlined in Research Question 2. Three levels of coding are present. The table below (See Table 3) illustrates the coding of Mr. Xu’s data on the personal factors influencing his PCK development.

Table 3
Coding of Mr. Xu’s data

Primary coding (Mr. Xu’s data)	Level 2 coding	Level 3 coding
Learned about U.S. teaching methods in the seminars; Attended workshops for teaching public speaking; Pursued a Ph.D. in English Translation; Incorporated language aspect into teaching; Wrote research papers; Considered establishing an interpretation course as an extension of public speaking;	Teacher learning Teacher agency	Personal factors

Any issues encountered during the interviews were documented in the memo, and efforts were made to gather additional data for subsequent interviews. The authors attained research reflexivity by consistently reflecting on the evolution of PCK within the four teacher participants, thus guaranteeing detachment from personal biases. The primary qualitative data for analysis consisted of excerpts from the interviews, while supplementary data included other documentary materials. Each individual case’s data was stored in a separate corpus. After the first author conducted the data analysis, the second author reviewed all of the data for verification.

FINDINGS

Based on the analysis of the interviews and various documents, we found that the four EFL teachers mainly formed their PCK based on their individual pursuits and accumulated practical teaching experience. Their developmental pathways demonstrate uneven characteristics as follows:

Cynthia’s Development of PCK

Cynthia was a native English teacher. Prior to coming to Beijing, she had no teaching experience. She later pursued a master’s degree in English as a Second Language (ESL). Her degree study on theories of second-language acquisition (SLA) facilitated her teaching and guided her to be more attentive in reducing students’ language learning anxiety.

Cynthia did “care a lot for the students” and consciously “increased language input.” Her judgment of the practicality of classroom activities and students’ learning challenges motivated her to learn.

“All lessons are tweaked yearly for practicality and students’ needs. This is something students deal with in their lives. The tweaking makes the conversation much more practical, and something [that] they can relate to and use in their lives.” (I-3)

Besides adjusting her PCK in the class based on the students’ needs, Cynthia actively reflected on her own learning experiences and incorporated suggestions from her teachers.

“When I was doing my master’s in ESL, I had a few teachers who really challenged us on the creative side, especially with technology. I think that was sort of a catalyst for me to really strive to be more than what is comfortable. Teachers’ expectations and this kind of challenge stretched me a little bit. So I think that was very influential in my life.” (I-1)

Cynthia delivered oral feedback to the students, addressing their strengths and weaknesses upon the completion of their oral presentations. Several students later conveyed their inclination towards receiving written feedback from the instructor, as they perceived it beneficial to retain the information imparted during the class. In her fourth year of teaching oral communication, Cynthia utilized an evaluation form to appraise the merits and shortcomings of her students’ oral presentations (O).

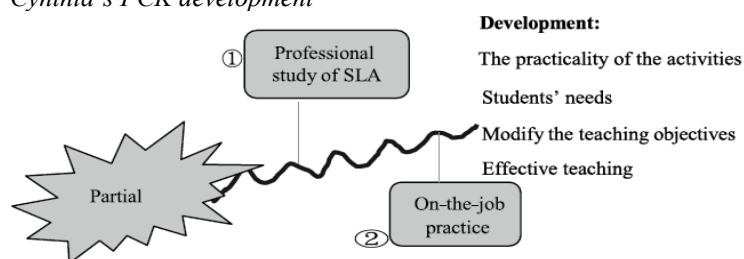
“Why did I consider adding paper feedback? Sometimes, students may feel shy when I provide oral feedback in class. Then, I write it down. It could be about the incorrect pronunciation of certain words or the structure of speech. Students feel more comfortable this way. For the oral comments, I only provide summary feedback once all students have completed their presentations. It could be about their shared issues. Some students did excellent presentations, and I praised them, but I did not praise the average ones.” (I-3)

Over the course of her career, Cynthia made significant modifications to various elements of her instructional approach, encompassing teaching objectives, content, and assessment strategies.

“Chinese students can be shy when it comes to expressing themselves as language learners. To help them feel more comfortable, I changed my teaching approach by starting with a game or other enjoyable activity to create a fun atmosphere. This approach encourages students to share their thoughts without feeling intimidated.” (I-2)

Given the university’s hands-off approach towards foreign teachers, Cynthia found it perplexing that all lesson plans relied solely on her expertise, leading to a sense of constraint. In the absence of a community of practice, she also had limited opportunities for peer learning, often necessitating her to work in isolation (N). Initially, her teaching objectives focused on facilitating student communication, but over time, they evolved to encompass the cultivation of more proficient and well-rounded individuals, achieved through the exploration of life-skill topics (N). Cynthia developed her PCK by adjusting teaching to accommodate students’ needs and gradually elevated her partial PCK with continuous learning and reflection. Her teaching was well recognised through student evaluations. Cynthia’s development of PCK is shown below (see Figure 4).

Figure 4
Cynthia’s PCK development



Richard’s Development of PCK

Richard had not received professional ELT training prior to teaching at a Chinese university. Initially, he lacked a comprehensive understanding of the distinctive attributes of Chinese students in their pursuit of English language acquisition, as well as the educational framework prevalent in China. However, as his experience grew, Richard gradually adjusted his expectations regarding both the students and the educational context. He strived to nurture students to excel as proficient public speakers and critical thinkers (S).

Even when confronted with students’ low teaching ratings, Richard maintained his teaching styles and principles. “There is never comfort in speaking. Why not try to get them to work hard?” He did not consider students’ preferences; as he said,

“The most important [thing] for me is for [the] students to do the work.” He also harbored no intention to alter his way of teaching because “it [would be] a huge loss for me.” (I-1)

Previously, Richard hypothesized that the students were able to furnish a comprehensive “definition” of a given word. For instance, when discussing the concept of “leadership,” one student defined it as the ability to exert control over people, while another student offered a different perspective on the quality of guiding individuals. The two students engaged in a moral discourse regarding the superiority of “controlling” versus “guiding.” He subsequently comprehended that the students lacked a comprehension of the etymology and constitution of English vocabulary. Then he adapted his instructional approach and suggested that the students consult the dictionary outside of the

classroom. He decided to retain this definition exercise to use it for future instructional purposes, aiming to enhance students' vocabulary comprehension (O).

In the past, Richard directed his attention towards high-achieving students in an effort to cultivate critical thinking skills among them. However, this strategy proved to be ineffective. Consequently, he has now shifted his focus towards engaging a broader spectrum of students.

"I thought the intelligent students will be a conduit, which would have a trickle-down effect within the class. The problem is that the best students do not really interact with the worst students, and they separate." (I-1)

Richard developed his PCK primarily through reading pedagogical books and constant reflection.

"All my knowledge of education comes from myself, not from school. I try to follow some ideas of Vygotsky. I shared a lot of time with my students to learn what they can and cannot do. Do not push them too hard." (I-3)

On rare occasions, Richard found that communicating with his colleagues was beneficial in enhancing his classroom management strategies.

"This was the first term that I banned mobile phones in the class. That was based on an idea from another teacher to ban mobile phones." (I-2)

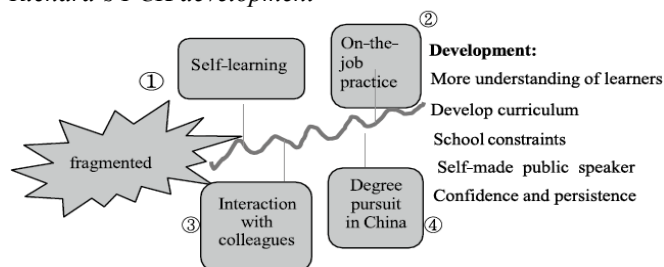
Nevertheless, Richard did not intend to alter his teaching focus of promoting critical thinking, and he considered catering to the students' desires to be a huge loss (N). He developed fragmented PCK through his unwavering commitment to fostering independent thinkers.

"I hope to stimulate something inside of student where they stop thinking about what is but think why it is and why they believe the things that they believe." (N)

Richard identified certain issues in his teaching methods and subsequently made adjustments by increasing student participation in the process of critical thinking. He later pursued a Ph.D. after experiencing disillusionment during his career. He acted as a self-made public speaker, and his PCK development is shown below (see Figure 5).

Figure 5

Richard's PCK development



Mr. Xu's Development of PCK

In the initial stages of his career, Mr. Xu adhered to the American instructional approach, which he acquired through his participation in educational seminars. Nevertheless, he did not attach importance to Chinese students' language incompetence, nor did he gain a sufficient understanding of some of the learned content (N). However, after attending workshops and speech seminars, he became increasingly aware of language's significant impact on students' confidence in their learning.

"I learned about U.S. teaching methods from some American instructors in the seminars. I was afraid of making mistakes and did not want to change [them]. However, in the real teaching, I felt at a loss, and I did find several problems. How effectively this model fits Chinese students remains unclear. Language problems were not addressed in U.S. classes. Originally, I used the same method when I was teaching the class. However, the students are non-native English speakers, and language barriers greatly affect their confidence. If we don't address these language issues, there won't be any real improvement." (I-3)

Mr. Xu aimed to include language learning, specifically speech appreciation, in his teaching approach (S). He strongly believed that "language is the essence of communication and that studying exceptional speech excerpts would benefit students in the language aspect." (I-3) Mr. Xu, currently pursuing a Ph.D. in English Translation, has implemented translation exercises in his classroom, aiming to facilitate the code-switching process between the two languages for his students. He even contemplated the possibility of establishing an interpretation course as a natural extension of the public speaking curriculum due to the numerous similarities shared between the two disciplines, including language and pronunciation (N). Mr. Xu started his teaching career with limited language awareness. However, he actively incorporated this aspect into his teaching methods over time, showing a dedication to continuous growth.

"Some students told me they learned a lot from translation exercises analyzing the speech videos. However, they regarded merely following the model and structure to be too technical and rigid and felt that it did not reach them on an emotional level." (I-1)

He subsequently endeavored to integrate teaching with research, as per his supervisor's recommendation, and commenced writing papers on student motivation.

"I am feeling empowered in my teaching after doing research" (N).

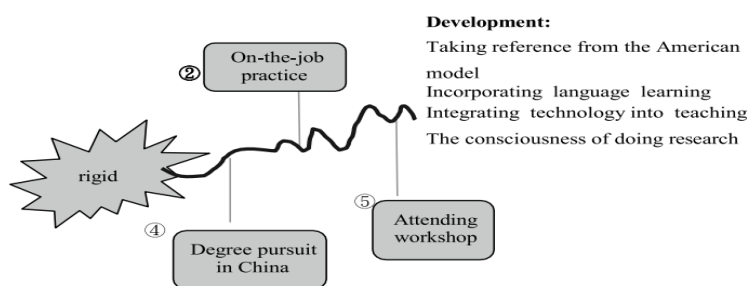
Initially, Mr. Xu provided verbal feedback that encompassed a comprehensive summary of the issues encountered by all the students. In the final term feedback, several students expressed dissatisfaction with this form of evaluation, citing the problem of quickly forgetting the general comments. Consequently, Mr. Xu initiated exclusively offering written feedback, prioritizing identifying common issues among the students (O). He subsequently uploaded the written feedback onto the online platform, along with a showcase of exceptional student speeches.

"By engaging in teaching, I enhanced my understanding of the evaluation methods and

incorporated additional resources and illustrations into my instructional approach. I exerted considerable effort and sense that I am growing more experienced. Undoubtedly, there are numerous challenges. However, I believe my teaching can be enhanced. I am confident that I will be able to perform even better in the future." (I-2)

At the beginning, Mr. Xu perceived his instruction as primarily focused on skills and placed excessive emphasis on the linguistic component (N). After acquiring a more profound comprehension of speech, Mr. Xu's instructional approach transformed. Additionally, his pursuit of a Ph.D. prompted him to recognize the value of engaging in research to enhance his PCK growth (N). With continuous reflection and a gradual understanding of the subject matter, Mr. Xu elevated his original rigid PCK. Mr. Xu's development of PCK is shown below (see Figure 6).

Figure 6
Mr. Xu's PCK development



Ms. Shi's PCK Development

Without knowing what to focus on while instructing in the first round of teaching, Ms. Shi drew upon her tutoring experience and followed the instructional directions in the textbook. To teach critical thinking, Ms. Shi searched for textbooks used in American universities that were verified as facilitative in helping students conduct arguments (N). She introduced these textbooks to her students.

Ms. Shi actively sought student feedback to enhance her PCK and engage in reflective practice. At the end of each semester, she encouraged students to evaluate the course, providing valuable instructional improvement feedback.

"Every year, students are required to complete an assessment. Initially, I provided them with a blank sheet of paper and requested that they express their thoughts on the strengths and weaknesses of the course instruction. Occasionally, their remarks were rather ambiguous, such as finding the material too challenging or unable to keep up. Subsequently, I created a structured evaluation form to encourage more detailed feedback regarding the quality of instruction." (I-2)

Ms. Shi diligently recorded all student feedback in a notebook to improve her teaching

methods for each subsequent semester. One notable observation was that many students expressed a desire to enhance their debating skills by improving their fluency in speech (O). Ms. Shi realized that the students had misunderstood the debate. Matter, manner, and method are the key elements of the debate, and students need to prioritize the content over the language itself (S).

Ms. Shi's development of PCK was greatly influenced by her experience tutoring students for debate competitions.

"Participating in debate events can have a significant impact. Tutoring students for debate events on at least five occasions is important to teach a debate class effectively. By listening to persuasive arguments and cross-examinations, you better understand how to create compelling refutations. Additionally, you can gather topic ideas for the class and learn from other tutors through sharing experiences." (I-1)

At the outset, Ms. Shi engaged in independent study for the course, but over time, she started participating in seminars to improve her pedagogical abilities. The guidance provided by experts had a substantial impact on her teaching approach, and she also benefited from the knowledge shared by her

colleagues (N). She incorporated the comedic element into her course preparation based on “the recommendation of an expert.” She also contemplated establishing some follow-up courses, drawing inspiration from the tutoring debate events.

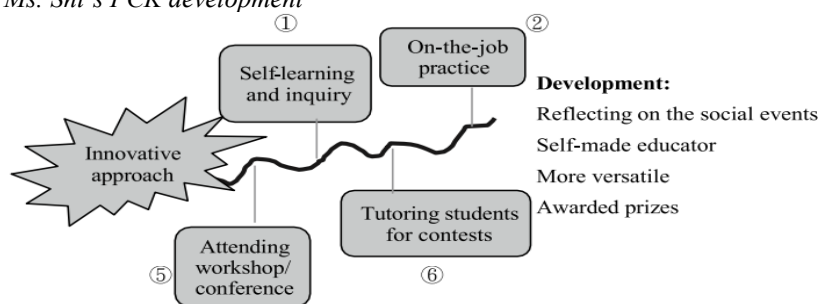
“In the future, I consider setting up the course Western History of Thoughts or Logics, and this actually is the essence for effective debate.” (I-3)

Ms. Shi devised a variety of activities to enhance students’ critical thinking and communication skills. These activities included identifying logical fallacies, analyzing arguments, engaging in Socratic dialogues, and keeping reflection journals (N). She also began writing

essays on various debates, albeit in an unsystematic manner, which gradually led to an improvement in her skills. Her innovative teaching methods have been recognized through receiving prestigious awards. However, Ms. Shi’s aspirations extended beyond being a mere language instructor; she aimed to become an educator who fosters the development of future generations with a global lens and humanistic approach to communication (S). Ms. Shi has acquired a wealth of PCK through various means, including gathering student feedback, engaging in self-reflection, and reading actively. Ms. Shi’s development of PCK is shown below (see Figure 7).

Figure 7

Ms. Shi’s PCK development



Discussion

The four EFL-speaking instructors overcame various pedagogical challenges and showed varying degrees of growth in their teaching practices. In addition to gaining new perceptions of the pedagogical curriculum, they attempted novel teaching methodologies and gradually accumulated an abundance of PCK. In the following section, the influencing factors of PCK development and its pathways will be discussed.

Influencing factors of PCK development

PCK development is not completed overnight; instead, it evolves and changes gradually. The participating teachers agreed that the critical resources for developing PCK included teacher learning, on-the-job practice, communication with colleagues, pursuing a degree, attending workshops, and tutoring students for contests. Personal and contextual factors influence their PCK development.

Personal factors

Personal factors are observed to influence teachers’ PCK formation and development. These factors include teachers’ personalities, teacher learning, and teacher agency.

The four EFL-speaking instructors exhibited differing personalities. The main differences among teachers lie in their personalities, willingness, and emotions (Jiang, 2022). In the classroom observations, Cynthia and Ms. Shi demonstrated more passion and consideration, as they aimed to customize their teaching to meet the needs of their

students. For instance, Cynthia consistently commended the students and motivated them to express their opinions in order to alleviate their language learning anxiety. Ms. Shi demonstrated composure, open-mindedness, and flexibility in her teaching methods. She fostered an environment where students felt encouraged to express their views on the strengths and weaknesses of the course instruction, leading to subsequent adjustments in the course content. Richard and Mr. Xu exhibited a higher level of strictness towards the students, showing an intolerance towards any lack of proficiency in critical thinking or language use. Richard was accustomed to evaluating students who demonstrated a lower level of cognitive abilities. Mr. Xu demonstrated limited flexibility and placed excessive emphasis on linguistic aspects, often criticizing students for their subpar written work.

All four EFL teachers in this study demonstrated a notable inclination toward teacher learning, which is facilitative to their PCK development (Djulete, 2021). Transitioning from an initial mindset of “taking it for granted,” they slowly evolved to recognize more challenges within their instructional practices and established a distinctive pedagogical style. Their professional agency also differed. Teacher agency is one variable in classroom decisions and professional development (Hull & Uematsu, 2020). Ms. Shi exhibited the highest level of teacher agency by implementing an innovative approach in her speaking instruction and employing diverse adaptable strategies to integrate teaching and research activities. She was a self-

made educator who proved to be more versatile. Discerning problems in their instruction, Cynthia and Richard actively adapted to the new educational context. Mr. Xu also elevated his original rigid or partial PCK to a more balanced one by pursuing a higher degree.

Contextual factors

Besides personal factors, the variety and complexity of educational contexts also influence the development of teachers' PCK.

During her studies, one of Cynthia's teachers presented her with a challenge in the field of technology. The evaluation system, which heavily depends on teacher evaluations to decide on teachers' contract renewals, also exerted pressure on her pedagogical approaches. Richard was instructed by his colleague to ban the use of mobile phones in the classroom. The criticism he received from the university led to a decrease in his expectations for the students and a shift in his pedagogical approach. Mr. Xu received encouragement from his supervisor to integrate teaching and research activities. His sense of isolation while teaching the public speaking course dampened his enthusiasm even more. Ms. Shi sought guidance from experts on incorporating humor into her debate instruction, and she was

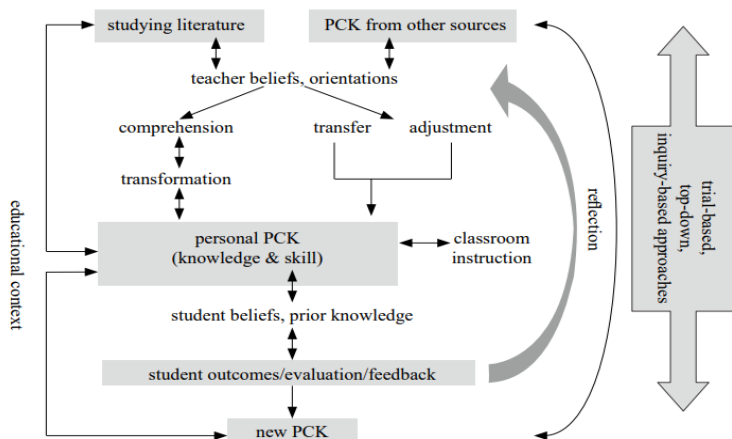
subsequently acknowledged and commended by her university for her outstanding teaching abilities. The establishment of a community of practice has further heightened her passion and dedication.

Multiple contextual factors have influenced the career paths of the four EFL-speaking instructors. From their narrations, we understand that the classroom is a venue for displaying their PCK. However, in developing PCK, diverse contextual factors can influence teachers' formation and evolution of PCK (Sadeghi et al., 2022). These factors include teachers' expectations, influences from colleagues, and the stringent appraisal system within the university. These factors effectively facilitate the transformation of implicit knowledge into explicit knowledge, thereby enabling the process of developing, preserving, and transferring PCK. The development of teachers' PCK is a long-term, context-dependent, and dynamic process that goes through a variety of adaptations.

Pathways of EFL Instructors' PCK Development

After analyzing the data, we found that there are two pathways to PCK development, and every EFL-speaking instructor follows either one or both (see Figure 8 below).

Figure 8
Pathways of EFL-speaking instructors' PCK Development



The first path to PCK development involves thoroughly examining literature and reference materials, then translating acquired knowledge into a form that is easily comprehensible for students, considering their individual levels of understanding. Teachers serve as both the recipients and creators of knowledge (Fernandez, 2014). New PCK was generated through teachers' persistent self-reflection and the assessment of students' learning outcomes. Filters that influence the transformation of subject matter into personal PCK and students' comprehension of subject knowledge include teachers' and students' beliefs and orientations. Due to their "fairly Western-style thinking," the first

pathway is primarily adopted by NETs in developing their PCK. They rarely work with other channels because of language barriers, inadequate adaptation to the local context, deliberate attempts to preserve their freedom, and, in the Chinese context, a lack of management support for their development.

The *Mind Series*, read by Cynthia, inspired her to design life-skills topics. Mr. Xu read a basic concept of rhetoric, "protasis," which was associated with the course content. Later, he proceeded to introduce this concept to his class by employing an analogy to illustrate it. Consequently, this led to the development of a novel form of PCK.

During the first round of course preparation, Ms. Shi read arguments and propositions in debates extensively for inspiration. Considering the TV hostesses' scripts suitable for her teaching methods, she analyzed them and demonstrated how to make practical refutations.

Another pathway involves acquiring PCK from other teachers or transferring it from different courses to enhance one's own pedagogy and PCK through self-evaluation and reflection. This approach is becoming increasingly common among Chinese EFL teachers because of their greater familiarity with the local environment, an ingrained mindset to learn from others—particularly authorities and experts—and the stricter teacher management system to which they belong, even in terms of professional development. Mr. Xu and Ms. Shi transferred imitation and recitation to their speaking courses and discovered that students enjoyed these activities. Ms. Shi also integrated experts' recommendations to infuse humor into her debate instruction and leveraged her tutoring experience to enhance instructional settings. This type of PCK adjustment or transfer can also be achieved by attending seminars, workshops, community interactions, or working as a coach to prepare for tests and contests.

The developmental pathways depicted above exhibit characteristics of gradual, evolving, and fluid processes. However, the patterns of their PCK development vary in each case. Cynthia started her career in China through a "survival" phase and grew into a more confident "expert" phase. Richard persisted in his dream after going through a period of "losing his way." Cynthia and Richard faced a "trial-based" pattern during their PCK development because they possessed extensive knowledge of oral communication; however, they were both unfamiliar with the local educational ecology and had to learn through trials and adjustments. Mr. Xu's path from being a teacher upon graduation does not exhibit any explicit stages. He adopted a "top-down" model, emphasizing mere skills training, where students' preferences were not adequately considered. Ms. Shi was well-educated, more academically inclined, and had experience as a visiting scholar. She was highly prone to personal inquiries and was devoted more to self-reflection and transformation. In the quest for truth and solutions, she created novel approaches to choosing thought-provoking topics from newspapers or using "open interviews." These "inquiry-based" practices prioritize the students' learning process by exploring questions, answers, and analyses.

The PCK development pathways and patterns support the model presented by Fernandez (2014, p. 82): "comprehension, transformation, instruction, evaluation, reflection, and new comprehension," which are crucial aspects in developing PCK. Persistent reflection and self-evaluation in various educational contexts are necessary to renovate the

original PCK. Taylor (2004) classified reflection as practical, technical, or emancipatory. EFL-speaking instructors conducted technical reflection through reasoning to promote their teaching process and practical reflection by interacting with colleagues and students to enhance their understanding. Finally, they gain power and liberate themselves from environmental constraints through emancipatory reflection. In addition, the development of four speaking instructors' PCK can be observed to follow a ladder-shaped progression. The period of professional stagnation the teachers experienced was intertwined with their occasional progress and advancements, which can be ascribed to the impact of sociocultural factors and their proactive introspection.

Data analysis shows that the constituents and development of PCK involve personal traits rather than canonical knowledge. The four EFL teachers exhibited different perceptions of the various perspectives on speaking instruction. With the accumulation of their pedagogical experience and reflection, their PCK changed, and the ongoing modification process became a part of their PCK as something dynamic rather than static. Their PCK also involved the transformation of the subject knowledge into actual instructions. Teachers can adapt their knowledge to facilitate student learning through active construction, adjustment, transfer, or modification. They adjusted certain impractical teaching goals, such as Mr. Xu's excessive focus on linguistic issues and Richard's endeavor to instruct students in a Westernized approach. Their absence of formal training in English teaching has also led to the deficiency in canonical knowledge. However, they later acknowledged these issues and deliberately acquired knowledge in English teaching, gradually adjusting to new pedagogical priorities. The development of PCK is a cyclical process involving constant expansion, reflection, and integration. Thus, PCK has been demonstrated to have a transformative rather than an integrative effect. Although the PCK framework consists of six primary components, it is flexible enough to be adapted to include a varying number of subcomponents.

Implications

Based on the findings and discussions of this study, EFL-speaking instructors' PCK development offers suggestions for teachers' non-cognitive aspects and professional development. Firstly, the four participating teachers conducted in-depth reflections on their teaching, facilitating their sustainable PCK development. Their learning initiatives and active reflections promoted their expertise in teaching practices. Thus, teachers' non-cognitive perspectives, including motivation, emotions, and reflective tendencies, should be considered (Nazari et al., 2019). Additionally, it is necessary for EFL

teachers to deeply reflect on their internal needs, confront challenges, modify their knowledge models, and formulate career development plans to better reform the curriculum. Secondly, combining teaching and research embodies EFL teachers' active teacher agency (Wang & Lam, 2022) and can significantly enhance EFL teachers' critical thinking (Li et al., 2021). Therefore, it is of utmost importance for speaking instructors to mobilize their teacher agency and undertake research in specialized academic domains or partake in action research that is directly relevant to their instructional practices.

The paths of PCK development also provide suggestions for teachers' professional development. The knowledge transformation they underwent offers insights into how EFL teachers survived and developed their pedagogy amidst curricular reforms. The shift in curriculum from skill-oriented to content-oriented presents significant challenges for university EFL teachers, leading to increased demands for their knowledge construction. The instruction of courses related to speaking necessitates the accumulation of knowledge from diverse perspectives, including language awareness, phonetics, pragmatics, grammar, interpretation, and logics. The integration of diverse knowledge domains has the potential to enhance the development of PCK (Evens et al., 2018). Considering the limited knowledge reserves of the four EFL teachers, it is recommended that teachers engage in extensive reading and be prepared to transition from the domain of necessity to that of autonomy. It is suggested that receiving training in English teaching serves as a catalyst for developing PCK. EFL teachers' professional learning and reading can facilitate their subject knowledge acquisition and PCK enrichment (Suharyadi et al., 2021).

In addition, attending expert lectures is another key method for novice Chinese EFL teachers to acquire PCK. Unlike teachers in other disciplines, there is no specific education plan for training speech or debate teachers in Chinese universities (Gong, 2012), which leads to a lack of pre-service teacher education. Therefore, workshops and seminars provide opportunities for teachers to engage in structured learning (Cesur & Ertas, 2018), especially in programs that focus on speech and debate training. The pre-service training program should be restructured in order to effectively address PCK (Getu & Teka, 2018). Furthermore, establishing a community of practitioners may further enhance teachers' cooperative learning and professional development in the long term. As the cultivation of a positive and forward-thinking environment within the workplace has been found to enhance teachers' sense of empowerment and commitment to their PCK development, it is imperative to provide increased financial and

policy-level assistance to EFL-speaking instructors to expedite their professional development.

CONCLUSION

This study employs a qualitative narrative case study approach to investigate the factors that influence PCK and the developmental trajectories of EFL teachers' PCK in the Chinese educational context. The study finds that personal and contextual factors influence teachers' PCK development, and two paths for development were presented. In the first path, teachers acquire subject knowledge through learning and reading, then convert it into a comprehensive form for student learning. They form PCK by engaging in active self-evaluation or reflection. This path is typically used in NETs. In the second approach, teachers acquire PCK by directly adopting it from other courses or instructors and subsequently applying it to their own teaching through direct transfers or adjustments. Chinese EFL teachers often adopt this approach. The four EFL teachers demonstrated three models of PCK development, including the trial-based model, top-down model, and inquiry-based model. The PCK development is facilitated through a range of resources, including engaging in on-the-job practice, participating in professional reading and learning, and attending conferences and workshops. Understanding these influencing factors and pathways could assist both local and global EFL-speaking instructors in fostering lifelong learning through reflective adoption of diverse models of PCK development.

Although this study only included a limited number of EFL-speaking instructors, it is crucial to acknowledge that the scope of the research did not permit an exhaustive examination of all the developmental trajectories of EFL-speaking instructors' PCK transformation. Despite this, the study has successfully fulfilled its objective by examining the essential factors that impact the PCK advancement of EFL-speaking instructors and the various routes through which PCK evolves. It also highlights the dynamic nature of PCK and underscoring EFL teachers' self-evaluation of their beliefs and practices through a critical perspective, which helps to enhance the sustainability of teachers' professional development. Future research endeavors may prioritize investigating PCK development among a broader sample of EFL-speaking instructors or implementing longitudinal studies to analyze the evolution of teachers' PCK over an extended timeframe.

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