Examining Pedagogical Content Knowledge (PCK) for Business English Teaching: Concept and Model

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Abstract

This paper examines pedagogical content knowledge (PCK) in the teaching of Business English (BE) in the EFL context. The analysis of PCK for BE teaching centers on the two key ideas of concept and model. PCK is a construct of several components and emphasizes the representation of subject matter knowledge for the learners. The identification of PCK components for BE teaching is indicated in the context of a specific subject area. Both domain-general components and content-specific sub-components are identified with reference to the cross-disciplinary nature of BE teaching in EFL. This paper proposes a PCK model for BE teaching to illustrate the inter-relationship among PCK components. The PCK model for BE teaching will help BE teachers to understand essential teacher knowledge in this discipline, and to direct the teachers to bridge the knowledge gap to teach effectively.

Key terms: pedagogical content knowledge, Business English, components, PCK model, context

1. Introduction

Pedagogical content knowledge (PCK) is an "amalgam" (Shulman, 1986b) of content and pedagogical knowledge. PCK is expected to create an impact on teaching practice because it is closely related to "the ways of representing and formulating the subject that make it comprehensible to others" (Shulman, 1987, p. 9). A considerable amount of research was conducted in recent years to explore PCK in different subjects (Abell, 2007; Andrews, 2003; Cochran, DeRuiter, & King, 1993; Fernández-Balboa & Stiehl, 1995; Grossman, 1990; Magnusson, Krajcik, & Borko, 1999; Park & Oliver, 2008b). The research findings have contributed to teacher education and the professional development of in-service teachers. However, few studies have been conducted in Business English (BE) teaching despite the need of teachers to build their knowledge base about how to teach it (Bhatia & Bremner, 2012; Liu, 2009; St John, 1996). The number of BE courses has mushroomed since the 1990s as a result of teaching English as a business lingua franca in EFL contexts (Nickerson, 2005; St John, 1996). Yet there is little published PCK research in BE teaching to echo its booming status in teaching practice.

PCK research in BE teaching should be conducted despite the rich research findings in other subjects such as science (Magnusson, et al., 1999; Park & Oliver, 2008b) and mathematics (Dapaepe, Verschaffel, & Kelchtermans, 2013). These findings are not applicable to PCK for BE teaching because PCK is specific to a particular subject content. Shulman (1987) defined PCK as the knowledge that teachers use in transforming content knowledge into forms that are comprehensible to students. He intended to highlight the role of subject content knowledge and emphasize the intersection of pedagogical knowledge and content knowledge for teaching purposes. (Berry, Loughran, & VanDriel, 2008). In this regard, PCK is specific to the subject being taught.

PCK research in BE teaching can be informed by previous studies within or beyond the boundary of the subject. PCK research in BE teaching can borrow ideas from widely agreed-upon concepts and models across PCK research although findings in other subjects may not be applicable for BE teaching. For example, PCK is generally defined as a construct of several components; and PCK model is established to indicate the inter-relationship among the components (Lee & Luft, 2008; Magnusson, et al., 1999; Rollnick, Bennett, & Rhemtula, 2008; Tsui, 2003; Turner-Bisset, 2001). This paper reviews previous PCK research and some well-accepted PCK models. Based on the literature review, this paper establishes a PCK model for BE teaching through a careful examination of the PCK concept in BE.

2. Overview of PCK research

Much research has been conducted to explore PCK concept in different subjects and to examine its components since its introduction. PCK can "explain the diversity of directions, innovations, and challenges" (Berry, et al., 2008, p. 1273) in the work of teachers. The introduction of PCK has driven in-depth research into teacher knowledge and generated many empirical studies on the role of PCK in teaching practice and the development of PCK among teachers. Relevant research has found that PCK is essential for effective instruction and positively related to students' learning outcomes (Dapaepe, et al., 2013). PCK for BE teaching needs an in-depth research not only for the sake of enriching PCK research in general but for the sake of enhancing BE teaching specifically.

2.1 Concept of PCK

PCK emphasizes the understanding and representation of content knowledge for teaching purposes. Shulman (1987) described PCK as "… the most regularly taught topics in one's subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations and demonstrations …" (p. 9). Shulman's concept of PCK focuses on two crucial points in teaching, namely, understanding and representation. PCK is highly relevant to teaching practice, and provides teachers with pedagogical reasoning based on specific content and specific learners and context.

PCK is an elusive concept and difficult to define. As knowledge under the influence of content knowledge and general pedagogical knowledge, PCK carries some traits of these two categories of knowledge. Researchers have defined and depicted PCK in different ways when examining the concept from different perspectives. While some researchers (Gudmundsdottir & Shulman, 1987; Shulman, 1986b, 1987) stressed the central role of content knowledge in PCK, others emphasized its pedagogical nature (Cochran, et al., 1993; Cochran, King, & DeRuiter, 1991).

PCK is generally defined as a construct of several components associated with how to transform content knowledge into pedagogically powerful strategies, but PCK components need to be identified in a specific subject. A number of studies have been conducted in response to teaching in different subjects like English (Grossman, 1990), mathematics (Lee, Brown, Luft, & Roehrig, 2007), science (Magnusson, et al., 1999) and physical education (You, 2011). Although these studies failed to provide an accurate definition of PCK, they contributed to the conceptualization and deepened the understanding of PCK from the perspective of epistemology. These studies identified distinct PCK components when examining the concept of PCK for a specific subject matter. Park and Oliver (2008b) reviewed PCK studies and concluded that PCK consisted of some components beyond the boundary of subject fields such as science, English and mathematics. PCK consists of domain-general components because PCK is about how to effectively transmit knowledge from teachers to students no matter what knowledge it is. In this regard, PCK contains some components that apply to all content areas. The literature review illustrates widely accepted PCK components across different subjects: "knowledge of presentation and instruction," "knowledge of students," and "knowledge of curriculum."(Park & Oliver, 2008b, p. 265). The literature review strongly supports the assumption of this paper that PCK components and the PCK model for BE teachers can be based on previous PCK studies in English teaching, ESL teaching as well as science teaching.

2.2 PCK models

PCK is a construct of several components and models are usually employed in PCK research to present this complex construct. Gess-Newsome (1993) suggests that good models need to "organize knowledge in new ways, integrate previously disparate findings, suggest explanations, stimulate research and reveal new relationships" (p. 3). In the same way, PCK models should organize PCK components into a construct by illustrating their inter-relationships so that PCK can be precisely described and new research can be inspired based on those models. Previous PCK models are discussed for the purpose of establishing a PCK model for BE teaching.

The PCK model of Grossman (1990) consists of four components, namely, "conception of purposes for teaching subject matter," "knowledge of students' understanding," "curricular knowledge," and "knowledge of instructional strategies" (p. 17). Among these four components, "conceptions and purposes for teaching subject matter" is the most important PCK component as it reflects the goal of teaching. This component refers to "knowledge and beliefs about the purpose for teaching a subject at different grade levels" (Grossman, 1990, p.8). English Teachers, for instance, have different purposes of either teaching students the skills of communication via English or inputting linguistic knowledge. Grossman's model is widely cited in PCK research but it is also widely criticized from the integrative perspective. Grossman treats the four components as static and independent elements. The static or independent view of PCK components is of little significance to teachers, for PCK components do not exist separately but rather interact and integrate when comprising PCK (Fernández-Balboa & Stiehl, 1995). Effective teaching will occur if teachers integrate all PCK components and apply them to their specific teaching environments.

Andrews (2001) has established a PCK model for ESL teachers. This model clarifies PCK components of ESL teachers, but fails to show the inter-relationship among the components. Andrews stresses the role of teacher language awareness (TLA). TLA is a crucial PCK component for language teachers since it interweaves teachers' language proficiency and their knowledge about language (content knowledge). TLA will facilitate teachers to make the right decisions in class teaching by understanding language cognition and by understanding the learners' difficulty in language learning. However, TLA is over-stressed in his model and it overlaps with other PCK components of subject matter cognition and knowledge of learners. This overlapping leads to the confusion in clarifying the inter-relationship among PCK components. The confusion may lead to the misunderstanding of the PCK concept and the misuse of PCK in teaching practice. What is more, the model of Andrews blurs the distinction between PCK, knowledge of pedagogy and knowledge of context. In his model, knowledge of pedagogy and knowledge of context are treated as two PCK components, but they are widely regarded as independent categories of teacher knowledge paralleled with PCK (Shulman, 1987).

Cochran et al. (1993) introduced a PCKg (the alternative term for PCK in this model) model from a dynamic view. The new term of "PCKg" highlights the dynamic characteristic of PCK that it can continuously develop with four categories of knowledge. PCK in this model is represented by an expanding circle under the influence of four categories of knowledge: subject matter knowledge, knowledge of general pedagogy, knowledge of context and knowledge of students. Teachers develop the four categories of knowledge independently through teaching experience or other channels. PCK, therefore, is in continuous development among teachers since the four categories of knowledge are inter-related and exert collective influence on PCK. In this model, PCK and other categories of teacher knowledge "theoretically become so integrated and so interrelated that they no longer can be considered separate" (Cochran, et al., 1993, p. 267). This model illustrates the dynamism of PCK and explains the development of PCK by expanding the four categories of teacher knowledge. However, this model fails to clarify the boundary of PCK from other categories of teacher knowledge or to illustrate PCK components when PCK is regarded as a combination of other categories of knowledge.

Magnusson et al. (1999) constructed a PCK component model for science teaching from an integrative view. This model made an accurate description of five PCK components: 1) orientation to teaching science, 2) knowledge of science curriculum, 3) knowledge of students' understanding of science, 4) knowledge of instructional strategy, and 5) knowledge of assessment of scientific literacy. The model adds sub-components to each component, which are the observable and assessable elements of PCK components in teaching practice. In empirical studies, PCK can be assessed through observing those sub-components and follow-up interview (Park & Oliver, 2008b). Magnusson et al's model stresses tow-way interaction among PCK components and the two-way interaction helps shape PCK components as a whole construct. However, the integrative view does not penetrate the entire model because the inter-relationship only exists between the "orientation to teaching science" with the other four components, but not among the other four components. In fact, teachers combine all knowledge into a comprehensive on-site wisdom. As for PCK, teachers need to integrate all PCK

components for decision making in class teaching. Many empirical studies found that different elements of teacher knowledge are integrated in teaching practice (Jang, 2011; Loughran, Mulhall, & Berry, 2008). Teaching is not a simple once-and-for-all process but a circular process from "comprehension" to "new comprehension" (Shulman, 1987, p. 15). This finding indicates that the integration of PCK is accomplished through the ongoing readjustment by teachers' reflection and with the reflection, coherence among the components is strengthened (Park & Oliver, 2008a). Magnusson et al's model simplifies the integration of teacher knowledge and ignores the cyclical development of PCK through reflection. Despite the criticism, this model is still widely adopted in PCK studies.

2.3 Discussion of PCK research

The review and analysis of PCK literature demonstrates three prevalent trends of PCK conceptualizations. First, the conception of PCK centers on the basic idea of Shulman about the understanding and transformation of subject matter knowledge for teaching purposes. The transformation of subject matter knowledge involves a series of actions from the "preparation" of materials, "representation" of the ideas in various forms, "instructional selections" of teaching methods to "adapting" and "tailoring" instruction to specific learners and context (Shulman, 1987, p. 16). Therefore, PCK consists of several components to reflect the complexity of class teaching. Second, PCK research identifies PCK components and regards PCK as an integration of those components. The domain-general and content-specific components in PCK component research are explored and arranged in different subjects or from different views. Several studies do not only describe the components, but also testify to the inter-relationship among the components (Henze, vanDriel, & Verloop, 2008; Mohr & Townsend, 2002). Third, PCK models are established to illustrate PCK components in specific subjects and depict the inter-relationship among PCK components. PCK models have developed from the static description to the dynamic and integrative representation of PCK components. PCK components are well-organized into a whole construct in which the inter-relationship among components is well depicted. Meanwhile, sub-components are added so that each component can be observed and assessed. PCK model for BE teaching will be established from integrative and dynamic perspective so that integration among PCK components can be clarified and PCK development can be signaled. The interrelationship among PCK components indicates the development of one component will lead to the development of other components and ultimately the PCK as a whole.

3. PCK for BE teaching

The PCK of BE teaching is worthy of thorough and in-depth research to improve teaching practice. The essence of PCK lies in the application of teacher knowledge to specific class teaching, which is similar to the claim of Shulman (1986b) that teachers need PCK because "mere content knowledge is likely to be as useless pedagogically as content-free skill" (p.8) in teaching practice. This view indicates that PCK is more helpful and practical for teaching performance compared with content knowledge or pedagogical knowledge. BE teachers need PCK to represent their idea of the best method of teaching English in a business setting to their students.

3.1 Influence of other categories of knowledge

The influence of other categories of teacher knowledge should be discussed because PCK is under their mutual influence. The first factor to be considered is content knowledge. Content knowledge for BE teaching needs a combination of knowledge about language and knowledge about business (G. F. Wang & Zhang, 2011; L. F. Wang & Li, 2011) because of its cross-disciplinary nature (Dudley-Evans & St John, 1998; Liu, 2009; L. F. Wang & Li, 2011). However, this combination is not simply "1+1=2". These two kinds of knowledge have merged into a new form. This transformation indicates that the understanding of subject matter knowledge is not simply the addition of knowledge about language to knowledge of business, but a new kind of understanding of language use in content-based communication. This new understanding is more complicated than the two kinds of source knowledge. This understanding will change the purpose

and conception of teaching BE by "taking linguistic competence as its ultimate goal but taking the content knowledge of business, communication and culture as its knowledge base" (Liu, 2009). This understanding distinguishes teaching BE from General English teaching or other disciplines.

Knowledge of the understanding and needs of learners influences the different aspects of teaching from curriculum design to classroom instruction. BE teaching is ultimately designed to meet the specific needs of learners: target needs and learning needs. Target needs refer to what BE learners will be required to do with English in the target situation while learning needs refer to ways of mastering English in school (Cowling, 2007; Wozniak, 2010). Teachers of all subjects have the obligation of understanding the preconceptions and misconception of students of the topics to adapt the instructions intentionally and to target learners in class teaching. Needs analysis suggests that BE teachers should go further and deeper in these two aspects than general English teachers, for BE learners come to class with relevant business knowledge and that background knowledge may facilitate or hinder their BE learning.

Context knowledge contains the awareness of dual context. One is about where BE teaching takes place and the other is about where communication takes place. BE emphasizes the context of communication, for it concerns appropriate language use in business communication contexts (Ruiz-Garrido & Palmer-Silveira, 2008). The context can be as macro as social and cultural situations or as micro as institutional or corporate settings. Therefore, BE teachers need knowledge of communicative contexts. In addition, BE teachers are aware of specific teaching environments and learning environments, which, in turn, affects BE learning outcomes.

3.2 PCK components for BE teaching

The conception of PCK in BE teaching is complicated and difficult to pin down because of the cross-disciplinary nature of business English (Dudley-Evans & St John, 1998; Zhang, 2007). This cross-disciplinary nature comes from the fact that BE is deeply rooted in and governed by the general principles of the English language and international business. This cross-disciplinary nature requires a new orientation and purpose of teaching BE. This paper adopts the usual practice in PCK research and conceptualizes PCK by identifying a number of components. PCK is then regarded as an integration of these components.

PCK contains generic components beyond the boundary of subjects and specific sub-components that are closely related to subject matter knowledge. This section examines the generic components of PCK in the context of BE teaching. These components are (a) knowledge of the purpose for teaching the subject matter, (b) knowledge of student understanding, and (c) knowledge of instructional strategies and representations. Specific sub-components are identified to complete the picture for a better understanding of PCK for BE teaching.

3.2.1 Knowledge of the purpose of teaching BE

"Knowledge of purpose of teaching the subject matter" indicates the knowledge about the purposes for teaching a subject in horizontal and vertical views. The horizontal view refers to the general principle of teaching a particular subject, whereas the vertical view refers to the goal of teaching a subject at a particular level. This knowledge is regarded as the most important PCK component (Grossman 1990; Magnusson, et al., 1999) because it guides teaching reasoning and instructional decisions. This knowledge guides teachers to reconstruct subject matter knowledge and to represent the subject matter knowledge in a comprehensible way. It filters the subject matter knowledge of teachers through teaching reasoning, which distinguishes teachers from content experts. Besides the holistic understandings of subject matter knowledge, teachers should also understand and decide what to teach and how to teach.

Knowledge of the purpose of teaching BE refers to the knowledge of the goals of teaching BE as a discipline at college level. This component provides a "conceptual map" (Borko & Putnam, 1996) for BE teachers among a variety of goals of teaching the discipline. These goals are derived from the cross-disciplinary nature of BE, and range from

language proficiency enhancement to business deal fulfillment. Such goals enable BE teachers to perceive teaching from different angles of subject matter knowledge and to decide on different key elements for class teaching.

Knowledge of the purpose of teaching BE is the most important PCK component because it provides an orientation for the entire teaching process. This knowledge includes two sub-components, namely, the beliefs of teachers of the nature of BE and the pedagogical reasoning in BE. Teachers may have different perceptions and beliefs about the nature of BE. Two prevalent beliefs co-exist stating BE centers either on its linguistic nature or on its communicative nature. These two beliefs are attributed to the educational background of BE teachers as language majors. The pedagogical reasoning in BE teaching refers to the rationale of teachers for representation. These two sub-components are inter-related. The belief on the nature of BE will govern pedagogical reasoning and pedagogical reasoning will reflect the belief of teachers on the nature of BE.

3.2.2 Knowledge of student understanding of BE

Knowledge of the understanding of students refers to teachers' knowledge about students' understanding of a particular subject including their preconceptions and misconceptions of particular topics with this subject. Teachers are responsible for transmitting their knowledge to students (Fenstermacher, 1994). This transmission requires teachers to possess knowledge of students' understanding, perception, and misconception. With this knowledge, teachers can adapt their teaching materials and methods accordingly to instruct their target students.

Knowledge of students' understanding of BE includes students' preconceptions of BE and their needs for learning BE. The former refers to teacher knowledge concerning pre-conceptions and misconceptions of students toward BE in different genres or settings. The latter refers to teacher knowledge about the variations in the learning expectations of students such as their motivations and interests. This component is important in BE teaching because it aims to satisfy the needs of students.

Needs analysis provides an exact description of what learners need, lack, and want. This analysis addresses these gaps among learners. Needs analysis provides necessary information about what learners want from BE, their motivation for BE study, and their learning style. Knowledge of students' understanding of BE has pedagogical and curricular significance. Pedagogical significance indicates that it enables BE teachers to decide on effective instructions to cater to students who might be in possession of various preconceptions, interests, and learning styles. Curricular significance indicates that it will influence course design because BE teachers will set a proper teaching objective and teaching plan if they have a clear idea of what students need and lack. Learner needs are the starting points of BE teaching. Thus, knowledge of students' understanding of BE serves as the starting point for the course design and class instruction of BE.

3.2.3 Knowledge of instructional strategies for BE teaching

Knowledge of instructional strategies refers to the knowledge of the strategies of teaching a specific subject or a topic. This component is widely explored and examined in PCK empirical research as one external indicator of PCK (Loughran, Mulhall, & Berry, 2004; Nuangchalerm, 2011). This component is influenced by and enriched by the development of general pedagogical knowledge. However, this component refers to a set of instructive strategies designed for and applicable to one specific subject. Knowledge of instructional strategies and representation as a PCK component cannot be generalized according to the scope of its application (Magnusson, et al., 1999). An effective instructive method in science teaching may not be suitable for Language teaching and vice versa. This knowledge includes the understanding and the use of teaching strategies in representing subject matter knowledge. Teachers who possess this knowledge can judge whether and when a representation is effective for teaching a particular subject or topic.

Knowledge of instructional strategies for BE teaching refers to the knowledge of evaluating, judging, and deciding the instructional strategies applicable for BE teaching. This knowledge is comparatively salient because it can be represented in teaching behaviors and activities. BE teachers' knowledge of instructional strategies has branched out

from general English teaching and has borrowed new ideas from other disciplines such as tasked-based instruction from ESP and case studies from business teaching. BE teachers are expected to evaluate and decide on appropriate teaching methods for specific topics.

Instructive language is a sub-component inherited from language teaching. This subcomponent includes the conception of elaborating in-use language in business settings and the awareness of inspiring the interest of students through instructive language. This subcomponent also includes the minor aspects of when and how to introduce terms in BE. Instructive language can make up for the lack of subject matter knowledge when teachers interact with students who have more expertise in some area.

This component contains the sub-component of representation and class activities. This sub-component refers to the knowledge of representations and class activities for BE teaching and the knowledge of their strength and weakness in class teaching. This knowledge helps teachers decide on an effective representation or appropriate class activities. Task-based teaching is the fabric of BE teaching (Ellis & Johnson, 1994). However, the design of a suitable topic-specific task largely depends on the knowledge of instructional strategies. BE teachers should understand, evaluate, and decide on the most suitable teaching method for a specific topic as a fit-for-all teaching strategy does not exist in BE. BE teachers with limited knowledge of instructional strategies for BE teaching, however, lack flexibility in class teaching and stick to the method as planned.

3.2.4 Knowledge of BE curriculum

Curricular knowledge represents the fundamental pedagogical feature of PCK (Magnusson, et al., 1999) and relates teachers and students in school education. Knowledge of curriculum indicates teaching objectives in school context so that it can help teachers, especially novice teachers, to develop their teaching style (Zahorik, 1991). This paper treats knowledge of BE curriculum as a PCK component because of its vital role in school education.

Knowledge of BE curriculum refers to the knowledge about the general goal for BE education and the knowledge of curricular materials for specific courses and topics. Curricular knowledge is a crucial link between the purposes of teaching BE and teaching practice. BE teachers should have a holistic view of the BE curriculum and try to relate a specific course to the entire curriculum (Nan, 2005). Under the holistic view, the knowledge of BE curriculum consists of "vertical and horizontal curricular knowledge" (Grossman, 1990, p. 8). Vertical curricular knowledge refers to the upgrade of curricular design for a specific course while horizontal curricular knowledge refers to the integration of one course with other courses in the whole BE curriculum. Taking intercultural business communication as an example, the course sets a vertical curricular goal, organizing the content knowledge from easy to difficult. Meanwhile, it adjusts its horizontal curricular goal so that it can integrate knowledge of intercultural marketing with relevant knowledge delivered in English for marketing.

Silberstein and Tamir (1986) identified five major elements in the curriculum design, namely, syllabus, curriculum materials, instructional planning, curriculum in operation, and outcomes. Knowledge of BE curriculum contains the five elements but presents two salient sub-components, namely, curriculum materials and curriculum in operation. Curriculum materials are selected to represent the important conceptions and principles in BE courses, whereas curriculum in operation refers to the flexible planning of instruction tailored to specific learners. The two sub-components are equally important in class teaching. Effective curriculum materials bridge the knowledge of the purposes of teaching BE and BE learning outcomes. Curriculum in operation is the adaptation of curriculum materials to specific students in specific contexts.

4. PCK model for BE teaching

The review of PCK models presents the changes of understanding PCK from a static view to a dynamic and integrative view. PCK is dynamic and constantly develops with the development of any of its components. The components are

inter-related during PCK development and "the development of one can simultaneously trigger the development of others" (Veal & MaKinster, 1999, p. 15). The PCK model for BE teaching is established in accordance with dynamic and integrative view. A good PCK model has the explanatory power of identifying relationships among the components in this construct and has heuristic power by recognizing the gap between theory and practice (Gess-Newsome, 1999). Therefore, the PCK model for BE teaching is established by two criteria: 1) the model should precisely describe the components and their inter-relationships; 2) the model should inspire further research to bridge the gap between the knowledge that BE teachers have acquired and the knowledge demanded for fulfilling teaching tasks.

This paper adapts the PCK model of Magnusson et al. (1999) to present the PCK of BE teaching (see Figure 1). The model of Magnusson is illustrative and heuristic. However, three modifications should be made in order to adapt it to present PCK for BE teaching. First, the specific PCK sub-components for BE teachers should be identified. Second, the relationship among PCK components should be clarified. Third, the role of context in language teaching should be stressed and elaborated. This tentative PCK model highlights the integrative features of PCK components and sub-components. The two-way arrows indicate their inter-relation and inter-influence. "Knowledge of purposes of BE teaching" was placed at the top to indicate its utmost importance. "Knowledge of purpose of BE teaching" reflects the personal values and understanding of teachers. These personal values in turn determine "a repertoire of teaching methods that they believe are in tune with the ideas they believe are important for students to learn" (Gudmundsdottir, 1990, p. 47). In this regard, knowledge of purpose of BE teaching is important for BE teachers to understand what to teach and how to teach.
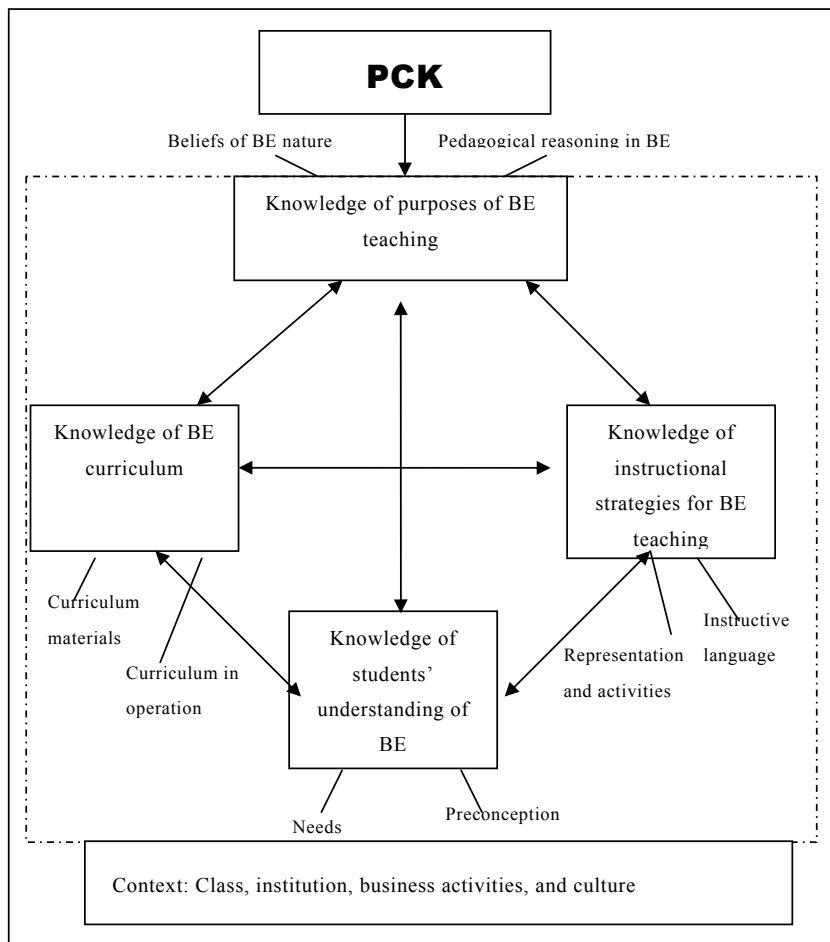

Figure 1: Proposed PCK model for BE teachers adapted from Magnusson et al. (1999, p.99)

The role of context in BE teaching is stressed in the model. BE presents the shift of focus from language skills to communication strategies in specific business contexts (Nickerson, 2005). This shift indicates that BE is context-specific. The background knowledge for business communication is highly related to specific contexts, such as knowledge of cultural context and context of different business activities. Knowledge about teaching is situated knowledge (Tsui, 2003), requiring teachers to adjust the perception and purpose of teaching according to different contexts, such as the specific demand of students and the teaching environment. BE teachers in EFL contexts need to take contextual information into consideration due to the importance of context in both content knowledge and pedagogical knowledge. The four components in the model were placed into a frame of context (see the dotted-line frame in Figure 1), which implies that these PCK components are context-specific and their development is governed by the context where teaching and communication take place.

This proposed model will enable researchers to measure and compare different components and sub-components in further research on the development of PCK for BE teachers. PCK is difficult to assess (Baxter & Lederman, 1999) if it is treated as a whole. As sub-components are observable or measurable units in teaching practice, they will help teachers understand the relevance of teacher knowledge and its effect on teaching practice. In empirical studies, PCK is evaluated with PCK rubrics in which PCK components and sub-components are scored according to the data collected from class observation and follow-up interview (Park, Jang, Chen, & Jung, 2011). The assessment of these PCK components and sub-components facilitates PCK assessment because one development will lead to the entire PCK development. This proposed model illustrates PCK components and sub-components that can be observed and assessed. From this perspective, the proposed model will enable researchers to evaluate PCK in further research on the development of PCK for BE teachers.

5. Conclusion

This research only focuses on the PCK concept and PCK model. The two key terms were utilized in examining PCK for BE teaching. In this research, PCK components and sub-components were identified for BE teaching. A model was also established to describe the inter-relationship among those components and to illustrate essential teacher knowledge for BE teaching. This proposed model is established from an integrative and dynamic view for two purposes: 1) the model intends to precisely describe the components, sub-components and their inter-relationships; 2) the model intends to inspire further research on PCK development. However, this research is only based on a literature review and the PCK model proposed in the paper is subject to modification based on the obtained data from fieldwork.

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