**Deanship of Graduate Studies**

**Al-Quds University**

# The Extent of EFL Teachers' Perceptions of Pedagogical Content Knowledge in the Upper Elementary Schools Stage

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## M. Sc. Thesis

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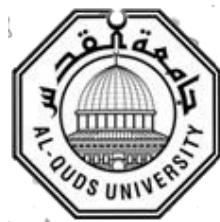
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Knowledge in the Upper Elementary Schools Stage**

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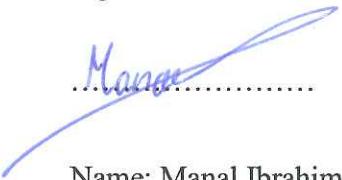
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**Dedication**

This thesis is dedicated to my parents, my husband, and to my lovely daughters without whose continued support and encouragement, I would not have been able to accomplish it. They were patient and supported me through the process, thank you for giving me the trust and strength to achieve my dream.

A deep gratitude to my supervisor Dr. Ziad Qubaja for his confidence, support, and encouragement for me through the research and through my study at Al-Quds University.

**Declaration:**


I certify that this thesis, submitted for the Degree of Master, is the result of my own research, except where otherwise acknowledged, and this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.


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Date: 6/ 2 /2018

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## Abstract

The purpose of this study is to explore the extent of EFL teachers' perceptions of pedagogical content knowledge in the upper elementary schools stages. To achieve this purpose and to answer the research questions, the researcher adopted a mixed method and chose a sample which consisted of (200) in –service EFL teachers. The researcher utilized two main instruments, a questionnaire and an interview. And to determine the reliability of the instruments, Cronbach Alpha was used. The collected data was analyzed and treated statistically through the means and standard deviations, t- test, one way ANOVA and Statistical Package for Social Sciences (SPSS). After the statistical analysis, the major findings of the study revealed that EFL teachers' pedagogical content knowledge perceptions were positive. The findings indicated that there were no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to gender, qualification, and number of training workshops. The findings also indicated that there were significant differences in the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools stage due to experience and in favor of years of experience for more than 10 years, and supervising authority in favor of private schools. Based on the previous findings, the study recommends that the researchers should use a variety of instruments including field observations to assess the PCK teachers possess. Also, re-evaluate the effectiveness of pre-service and in-service teacher preparation programs in promoting PCK Education. Researchers should conduct more empirical studies that depend on different variables.

# مدى ادراك معلمي اللغة الانجليزية لمعرفة المحتوى البيداغوجي للمرحلة الاساسية العليا في محافظة بيت لحم

**إعداد الطالبة: منال ابراهيم محمد ذويب**

**بإشراف: الدكتور زياد قباجة.**

**الملخص:**

هدفت هذه الدراسة لمعرفة مدى ادراك معلمي اللغة الانجليزية لمعرفة المحتوى البيداغوجي للمرحلة الاساسية العليا. ولتحقيق أهداف الدراسة قامت الباحثة بتطوير أداتين للدراسة وهما استبانة ومقابلة، وتم التحقق من صدق أدوات الدراسة وثباتها بالطرق الملائمة، وتم تطبيقها على عينة مكونة من (200) معلم ومعلمة في الفصل الدراسي الاول 2017/2018 .

وتم استخدام المتوسطات الحسابية والانحرافات المعيارية لكل فقرة من فقرات الاستبانة، واختبار (ت) (t- test)، واختبار تحليل التباين الأحادي (One Way ANOVA)، ومعادلة الثبات كرونباخ ألفا (Cronbach Alpha)، وذلك باستخدام الرزم الإحصائية (SPSS) وبعد جمع البيانات وتحليلها أظهرت الدراسة النتائج الآتية :

إن درجة إدراك معلمي اللغة الانجليزية لمحتوى المعرفة البيداغوجية للمرحلة الاساسية العليا جاءت بدرجة عالية.

كما أظهرت النتائج عدم وجود فروق ذات دلاله إحصائية عند مستوى الدلالة (0.05 ≥ α) في واقع مدى إدراك معلمي اللغة الانجليزية لمحتوى المعرفة البيداغوجية في محافظة بيت لحم للمرحلة الاساسية العليا تعزى لمتغير الجنس والمؤهل العلمي والدورات التدريبية. ووجود فروق ذات دلالة إحصائية عند مستوى الدلالة (0.05 ≥ α) في واقع مدى إدراك معلمي اللغة الانجليزية لمحتوى المعرفة البيداغوجية في محافظة بيت لحم للمرحلة الاساسية العليا يعزى لمتغير عدد سنوات الخبرة وكانت الفروق لصالح عدد سنوات الخبرة لأكثر من ١٠ سنوات ووجود فروق تعزى لمتغير نوع المدرسة ، وكانت الفروق لصالح المدارس الخاصة.

وفي ضوء هذه النتائج أوصت الباحثة على استخدام أدوات جديدة بما في ذلك الملاحظات الميدانية لتقييم المعلمين الذين يمتلكون معرفة المحتوى البيداغوجي ، كما أوصت الباحثة إلى الحاجة على إعادة تقييم فعالية برامج إعداد المعلمين قبل الخدمة وأثناء الخدمة في تعزيز معرفة المحتوى البيداغوجية.

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**Chapter One**

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**Introduction**

**1.1 Background of the Study**

Teaching is one of the most complicated jobs today. It requires broad knowledge of subject matter, curriculum, standards, a love of teaching, classroom management techniques and a desire to make a difference in the students' lives.  So, our present time is marked by unprecedented interest in teachers' quality, because it is the most important school-related factor influencing students' achievement, and a strong classroom teacher is the most important determinant of student' success (Stinson, 2015).

The educational system in Palestine has been experiencing changes and reforms and also in the field of teacher professional development, and there is a great demand on teachers to perform effectively in classrooms. Even the most well- prepared teachers still need to improve their knowledge and skills throughout their careers. Teachers' professional development involves all processes and designed activities that enable teachers to acquire knowledge, skills, attitudes and behaviors that enhance their abilities to function effectively (Kitta, 2004).  Reimers (2003) asked a question: Why is teachers' professional development important? The answer was that the professional development of teachers is a key factor in ensuring the reforms at any level are effective, and successful professional development opportunities for teachers have a significant positive effect on students' performance and learning. Therefore, teachers need parallel development of content knowledge as well as pedagogical knowledge, because professional development is very necessary for continuing education and keeps the teachers' minds active. In addition, training programs make teachers deal with the changes and enables them to equip themselves with the new techniques and methods that are required  in their jobs. For this regard, Palestinian Ministry of Education offers training programs to maintain teacher' pedagogical content knowledge (PCK), and to enhance the professionalism of teachers which includes a certificate afterward. Since the training stimulates teachers' knowledge of materials, skills and pedagogy, they will have more opportunities to make the learning process in the classroom successful.

In order to teach effectively, teachers should have a strong knowledge base of the material. When teachers' knowledge falls below a certain level, it is a significant impediment to students' learning, as well as a strong understanding of the material being taught, teachers must also understand the ways students think about the content, and be able to evaluate the choice behind students' own methods and identify students' common misconceptions.

Thus, effective teachers have to understand the content they teach and know how to explain it in a manner that their students could understand. They need to apply strategies to help their students increase their achievement. Also, they ought to understand and apply the knowledge of the children development in order to motivate and engage them in the learning-teaching process, and it is essential for them to become aware of the fact that they teach different students, each with special needs and talents, and different levels of motivation, attention, knowledge and maturity. In addition, teachers must have the ability to diagnose these individual differences. Lubart (2004) mentioned that cognitive development depends on a complex set of individual differences, and teaching a topic using a wide range of learning styles and activities allow students to find at least a part that fits their abilities and interests.

According to Alexander (2016), in the classroom settings, teachers are members of the social environments. Therefore, they directly influence children's growth and teaching. Alexander (2016, p.8) also mentioned that Vygotsky believed that the most effective learning happens when the new skill and knowledge are just on the edge of emergence, what he calls the "zone of proximal development". Moreover, teachers are the experts interacting with children to support and challenge their thinking, and they have to draw on multiple competencies to effectively serve as a scaffold between current knowledge and new knowledge, so teachers need to be skilled and knowledgeable with the content. Further, they should realize where the learner is, their actual knowledge and ability, where the learner should go, the potential knowledge and ability, and how to get them there. PCK subsumes all of the mentioned competencies as outlined by the sociocultural theory (Alexander, 2016).

Content knowledge (CK), pedagogical knowledge (PK) and pedagogical content knowledge (PCK) are necessary for effective teaching, and they were introduced many years ago by Shulman (1986) who described PCK as a special amalgam of content and pedagogy. He introduced a paradigm in which teacher's knowledge was classified into seven categories and they include: content knowledge, curriculum knowledge, general pedagogical knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts and knowledge of educational values. (Kitta, 2004) defined PCK as the knowledge of how to transform formal subject matter knowledge into something appropriate for a particular group of students. On the other hand, Nezvalova (2011) defined PCK as the ability to translate subject matter to a diverse group of students using multiple strategies and method of instruction and assessment while understanding the contextual, cultural and social limitations within the learning environment. He used the term translate instead of transform because content is adjusted to fit teachers' understanding of the students.

Teachers ought to have a good grasp of the subject matter before being able to transform it. They need to use a teaching strategy to make the subject matter accessible to the learners, and they need also to have an idea of possible learners' conceptions that the learners may have about the topic in order to prepare explanations that will help to eliminate or reinforce these conceptions. Moreover, teachers who have limited subject matter may contribute to the development of misconceptions in learners (Sibuyi, 2012).

Researchers from various educational disciplines such as English, science and social studies have been interested in exploring, analyzing and formulating what teachers' PCK is and have come to different views, such as: Aljaro et al (2017) Kanat (2014) Miqdadi & Al-

Omari (2014) Sanoto (2017) Mark (2000) Pitmann (2015) Ibrahim (2016) and Al-atrash (2016).

It has been noticed that some critical features of teaching such as the subject matter being taught, the classroom context, the physical and psychological characteristics of the students, or the accomplishment of purposes not readily assessed on standardized tests, are typically ignored in the quest for general principles of effective teaching (Shulman, 1986). Hence, teachers ought to be aware of these principles. In addition, they have to understand how to combine pedagogy and content effectively, and how to make a subject understandable to the students, so this study attempts to explore the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools stage.

## 1.2 Statement of the Problem

Studies have proved how difficult education is, especially with the progress and tremendous development of technology available to the students, which led to a complete change of the role of teachers. In order to keep pace with this development and progress, teachers should be armed with many necessary tools, methods, strategies and knowledge that help them in this difficult profession. Thus, to achieve the educational goals, the teacher must move from a carrier of information into a monitor and facilitator for students, and this requires a radical change in the concept of the teacher's role and tasks.

Although, the student is the center of attention in the process of teaching and learning, yet a teacher still plays an important role in this process (Migdadi & Al-Omari, 2014) . So being a teacher means being an expert in teaching in some content area. He/ She must have basic knowledge and the skills of the pedagogical principles and content knowledge, so having a deep understanding of the content isn't enough without the proper methodology and strategies available to facilitate students' learning. Let's take this example: the teacher may know some teaching strategies, but the lack of content knowledge may prevent the teacher's to determine which strategy is the best suited for a specific topic within the content area. The successful teacher must both understand the content very deeply and be able to share effectively that knowledge. When teachers possess both content knowledge and pedagogical knowledge relevant to that content, they possess pedagogical content knowledge, and that's the idea which Shulman, (1986)(1987) called for the teachers have to possess two elements: knowledge of the content and knowledge in teaching methods, so PCK means the deep knowledge of the teacher of a subject matter or a specific content and the rich knowledge of how to teach it.

The researcher has noticed through her work, as a substitute teacher, that some English teachers who teach English language tend to focus heavily on content rather than using specific strategies for teaching English language, or they don't understand what the expected curriculum goals are, and what resources are needed to achieve these goals. In addition, National Council of Teachers of English (NCTE's) conference (2006) put recommendations for what effective English teachers should know and be able to do upon entering the classroom, and teachers must have CK and know how to teach that content so that students can learn and demonstrate their learning, and it aligns with Shulman's (1986) (1987) notion of PCK. Therefore, this study attempts to explore the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools stage.

## 1.3 Objectives of the Study:

This study aims to explore the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools stage, and to explore whether their perceptions vary dude to gender, qualification, years of experience, number of training workshops and supervising authority.

## 1.4 Questions of the Study:

The study addresses the following main and sub-questions::

What is the extent of EFL teachers' pedagogical content knowledge perceptions in Bethlehem District? And, are those pedagogical content knowledge perceptions different due to gender, qualification, years of experience, number of training workshops and supervising authority?

## 1.5 Hypotheses of the Study:

The question of the study was turned into these null hypotheses as the following:

1- There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to gender.

2- There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to qualification (Diploma, Bachelor's degree, Master's degree).

3- There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to years of experience.

4- There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to the number of training workshops (less than 3, 3-5, more than 5).

5- There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to the supervising authority (public school, private school).

## 1.6 Significance of the Study

This study provides necessary information on the theoretical, practical and research fields.

**On the theoretical field**, this study is expected to introduce a theoretical framework about pedagogical content knowledge, content knowledge, pedagogical knowledge and professional development for teachers, curriculum designers and researchers.

**On the practical field**, the results of the study are expected to give the educators and decision-makers working in Ministry of Education, a clear vision to develop programs for professional development for EFL teachers in the upper elementary schools stage by focusing on the PCK principles. In addition, it is hoped that the study provides a good model that can be used to improve the educational process.

**On the research field,** Pedagogical content knowledge is the main point of most of the studies in the field of Science and Mathematics, but it is noticed that there have been fewer studies on foreign language teaching. The results of this study may bridge this gap and enrich the literature for further research, with further variables, stages and different instruments**.**

## 1.7 Limitations of the Study

The study is limited to the following:

**1- Locative limitation**: The study covered only public and private schools in Bethlehem District.

2- **Temporal limitation**:  The study was carried out in the first semester of the scholastic year 2017 -2018.

**3- Human Limitation**: This study consisted of all EFL teachers (male/female) at public and private schools.

**4- Conceptual Limitation**: The study is limited to the concepts and definitions previously mentioned in it.

## 1.8 Definition of the Terms

1-**Pedagogical content knowledge**: Shulman (1986) defined pedagogical content knowledge as a special blending of content and pedagogy that is uniquely the province of teachers, their own special form professional performance.

2- **Pedagogical content knowledge  perceptions**: The extent of teachers' understanding how to combine pedagogy and content effectively, and how to make a subject understandable to the students. The perceptions measured by a questionnaire of PCK in English language and interview.

3- **Content knowledge**: Shulman (1986) defined it as "the amount and organization of knowledge per se in the minds of teachers". It is also knowledge of the subject being taught.

4- **Pedagogical knowledge**: Park (2005) mentioned that pedagogical knowledge refers to knowledge about teaching, and it includes: knowledge of learners and learning, knowledge of classroom management, knowledge of instruction and curriculum, knowledge of assessment, and knowledge of educational goals.

2- **Professional development:** An ongoing process of learning  by using multiple educational sources for the teachers to improve their performance, to keep their competencies up-to-date and to achieve the objectives of the teaching/learning process successfully (Abu Shoqair & Abu Shaaban,2013).

3- **Upper elementary stage**: The grades between 5–10  (Palestinian Ministry of Education, 2017).

**Chapter Two**

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**Literature Review and Related Studies**

## 2.1 Introduction

In this chapter, a review of literature related to the  teachers' knowledge, content knowledge, pedagogical knowledge, pedagogical content knowledge and professional development is explored.

## 2.2 Teachers' Knowledge

Teaching requires certain qualifications rather than seeing it as a job that everybody can have or seeing it as a routine which takes place informally anywhere. It should be interpreted as a profession performed formally and the teacher manages the learners, plans lessons, allocates time and assesses the comprehension of the learners along with majoring in the field having the qualified knowledge (Shulman, 1986).

Teachers' knowledge and what they should know and how they should implement what they know is the center of studies in education. The early studies about teachers' knowledge were based on the field specifications and teachers' practice like materials and activities choice or planning and acting in accordance with the plans (Shulman, 1986).

This expression was first named by Shulman at a conference at the university of Texas in 1983 which was titled: The missing paradigm in the research about teaching, and what Shulman called the missing paradigm was the specific content and lack of attention that it was earning on the way to being a teacher. He offered to include what teachers know about their subject matter under the name content knowledge and that includes the comprehension of facts, concepts and the structure of a subject matter. Besides the content knowledge, he named two categories  for knowledge base of teachers to point out what teachers should know, they are : Pedagogical content knowledge and curricular knowledge, in other words, he expressed the importance of covering the knowledge about subject matter and the knowledge about how should this knowledge be presented to the students in line with the choice of appropriate programs and materials for teaching.

Shulman (1987) added four new categories to the knowledge base of teachers along with the three categories he declared in his study in 1986. The knowledge base of teachers was asserted to have seven categories, which are:

1- Content knowledge: It is the knowledge of the subject being taught. English teachers must have the proficiency in the target language, the degree of knowledge the teachers have about the formal properties of the language such as grammar, the culture of the second language (L2) community as well as an understanding of applied linguistics and curriculum development (Mohamed, 2006).

2- General pedagogical knowledge: It is the knowledge of pedagogical principles and skills in using the techniques and strategies that are not subject-specific including classroom management, and using group work. It is also the methodological options available to the teachers and the awareness of instructional strategies that could be applied to teaching by considering current theories of how languages are learnt (Mohamed, 2006).

3- Pedagogical content knowledge, which is the knowledge of how to teach a specific content in a particular subject domain. In addition, it is the teachers' knowledge of instructional strategies that could be applied in teaching the English language. It also refers to the way that the target language may best be presented and learnt, that is the methodology of language teaching. Moreover, PCK refers to knowledge that provides a basis for language teaching. It is the knowledge that is drawn from the study of language teaching and learning itself and which can be applied in different ways to the resolution of practical issues in language teaching. It could include course work in areas such as curriculum planning, assessment, reflective teaching, classroom management, teaching children and teaching the four skills (Asl et al, 2014).

4- Curriculum knowledge, which is the knowledge about the particular materials and programs used by teachers.

5- Knowledge of learners and their characteristics, which is the teachers' awareness of his\ her students, their learning strategies, their needs and problems in learning in order to know how to meet all students' individual differences (Mohamed,2006).

6- Knowledge of educational contexts, which involves knowledge of schools, classrooms and consideration of any context or setting where learning takes place (Shulman, 1986).

7- Knowledge of educational ends, purposes and values.

Richard (2010) proposed ten dimensions of teachers' knowledge and skills that are the core of expert teacher competence and performance in language teaching. The first is the language proficiency factor of the teacher, and there are several language specific competencies that a language teacher needs in order to teach effectively, like the ability to comprehend texts accurately, provide good language models and maintain the use of the target language in the classroom. Thus, the teacher's level of language proficiency will determine the level of that teacher's confidence.

The second dimension is the role of content knowledge, which is what teachers need to know about what they teach, and CK for language teachers includes what teachers know about language teaching, and constitutes knowledge that would not be shared with teachers in other subject areas.

The third dimension of teachers' knowledge is teaching skills. According to Richard (2010), the teachers' training involves developing a great number of teaching skills, which can be obtained by observing experienced teachers, and often by practicing teaching in a

controlled setting, using activities such as peer teaching. He also explained that having opportunities to experience teaching in various situations with different kinds of learners, and teaching different kinds of content, is how a repertoire of basic teaching skills is acquired. They include: procedural and managerial aspects of teaching such as lesson planning, rules and routines for classroom management, ways to open and close lessons, techniques for effective questioning, and eliciting and giving feedback.

The fourth dimension is knowledge required by the language teacher which is contextual knowledge. Given that teachers teach in many different contexts, in order to function in those contexts, that may some teachers acquire appropriate contextual knowledge that will enable them to learn to be effective in different contexts, background and cultures. Learning to teach in a specific context is a process of socialization that involves becoming familiar with a professional culture and its goals, while sharing values and norms of conduct, and this "hidden curriculum" of professional socialization is often more powerful than the school's prescribed curriculum.

The fifth dimension is language teacher personality, and this dimension goes beyond skills and knowledge to develop an understanding of what means to be a language teacher.

The sixth dimension is the learner- focused teaching dimension. He explained that teaching is performance, whereby the teacher takes accounts of both the social and learning interests of students, building a community of learners in the classroom. This is undertaken by managing the learning environment, with the aim of creating a pleasant and productive setting.

The seventh dimension proposed by Richard (2010) for language teacher is pedagogical reasoning, which takes into account the ways in which teachers' beliefs and cognitive processes shape their thinking and actions in relation to classroom practices.

The eighth dimension is the "theorizing of practice". It refers to the ways personal understandings and knowledge (theories) are shaped by practical experience of teaching. This helps to make sense of experience and informs classroom practice. Also, it involves reflection on one's teaching practice in a variety of ways, and theorizing about the effect of that practice on learners.

The ninth dimension of teachers' knowledge proposed by Richard (2010) is membership in community practice. It is about collaborative and sharing knowledge among language teachers. This can lead to enhance practices through teamwork and group collaboration, and it provides teachers the opportunity to work and learn together in activities with shared goals and responsibilities.

The final dimension of teachers' knowledge and skill is professionalism. English teaching requires a specialized knowledge base obtained through both academic study and practical experience.

Planning and teaching English subject is perceived to be a complex activity that needs several types of knowledge. Therefore, teachers who have integrated knowledge base will have a great ability to plan, reflect and teach. Also, effective teachers have direct influence in enhancing students' learning and achievement. Thus, a whole range of personal and professional qualities are associated with higher levels of learner achievement like content

knowledge, the ability to use a range of teaching strategies skillfully, pedagogical content knowledge, and knowledge of learners and their needs.

## 2.3 Content Knowledge

Helping students to learn the subject matter involves more than the delivery of facts and information. Actually the goal of teaching is to assist students in developing intellectual habits to enable them to participate in, not merely to know about (Kleickmann & et al, 2013).

Shulman (1986) was the first researcher used the term content knowledge, which reflected also the subject matter knowledge. He defined it: The amount and organization of knowledge per se in the minds of teachers. According to him, (CK) is a comprise of a collection of the literature and studies of a specific discipline as well as the nature of specific knowledge within the subject area. He mentioned this through the example of the English teacher.

> For example, the teacher of English should know English and American prose and poetry, written and spoken language use and comprehension and grammar. In addition, he or she should be familiar with the critical literature that applies to particular novels or epics that are under discussion in class. Moreover, the teacher should understand alternative theories of interpretation and criticism and how these might relate to issues of curriculum and of teaching.(p.9)

Shulman (1986) included the need for teachers to be familiar with the content. He suggested that this familiarity could help teachers to make meaningful connections to what students were learning in other classes.

In the different subject matter areas, the ways of discussing the content structure of knowledge requires going beyond knowledge of facts or concepts of a domain. It requires going beyond understanding the structure of the subject matter in the manner defined by scholars as Joseph Schwab who said that the subject matter includes both the substantive and syntactic structures (Shulman, 1986). He also cleared that the substantive structures are the variety of ways in which the basic concepts and principles of the discipline are organized to incorporate its facts, whereas the syntactic structure compasses knowledge of the process through which knowledge is generated in the field.

Tsui (2003) conceptualized English as a second language (ESL) subject matter knowledge as knowledge about language system which consists of phonology, lexis, grammar and discourse. Furthermore, Ellis (2006) mentioned that content knowledge is clearly the teachers' knowledge of English language, and she analyzed the aspects of the content knowledge of ESL teachers as follows:

1- The teachers' ability to speak and write English as a competent user.

2- The teachers' knowledge of English from an analytical perspective: Its phonology, grammar, syntax, lexical properties, generic structures, pragmatics realizations and literacy conventions.

3- The teachers' knowledge /experience of the acquisition of the content in formal contexts.

4- Knowledge of a second language and second language use.

Asal et al (2014) also mentioned that CK refers to English as a Foreign Language (EFL) teachers' knowledge of the subject, encompassing their proficiency in English along with their knowledge about the formal aspects of English such as syntax, phonology, etc.. In addition, CK refers to what language teachers need to know about what they teach and constitute knowledge that would not be shared by teachers of other subjects.

CK is the basic component of teaching knowledge and essential knowledge that influences students' achievement (Danisman & Tansili, 2017). It is also very important not only for teaching itself, but also for the evaluation of textbooks. Further, CK is the fundamental requirement for an effective teaching (Darling-Hammond et al, 2009). Thus, teachers who are competent in CK can know what kind of prerequisite knowledge necessary to teach a specific subject, what the appropriate examples and homework are, and what kind of illustrations can be used (Danisman & Tansili, 2017). In addition, those teachers may teach in a more interesting and dynamic way, while teachers with little CK may shy away from the difficult aspects of the subject. Therefore, teachers continually need to add to their subject knowledge in order to keep up-to- date with developments in a subject area.

The researcher defined the term content knowledge as the body of knowledge and information that teachers deliver to the students and who are expected to learn in a given subject, and it refers to the facts, theories, principles and concepts that are taught and learned in specific academic courses. Teachers should know English grammar, written and spoken language use, reading and listening comprehension at a certain level.

## 2.4 Pedagogical Knowledge

Teachers are required to have a deep understanding of the content they teach. In addition, they ought to have a strong understanding of teaching pedagogy to be able to teach effectively. Thus, students need to be effectively engaged in their own learning in order to progress in their skills and understanding of difficult concepts, so teachers facilitate this engagement through their knowledge of teaching pedagogy. Pedagogy was for a long time mostly associated with teaching. Knowledge was supposed to be transmitted to the learners, and pedagogical questions circled around suitable ways for teachers to instruct the learners (Oskarsson, 2014).

Agreement that subject matter knowledge is not enough for being a good teacher has led researchers to investigate what knowledge and skills are required for effective teaching (Kilic, 2009). It is not only the knowledge acquired by the classroom that matters, but also the process of imparting knowledge to the students by applying techniques and strategies that will make the lesson easily comprehended by learners, so if a teacher is able to present his/ her lesson in a such way that learners appreciate and appeal strongly, it means

the pedagogical knowledge of the teacher is sound (Tsafe, 2013). Teachers who have strong pedagogical knowledge have rich repertoires of teaching activities and they are able to choose tasks, examples, representations and teaching strategies that are appropriate for their students, and they know how to facilitate classroom discourse and manage time for classroom activities effectively (Kilic, 2009). In addition, teachers who apply good classroom conditions will improve the academic achievement of students and motivate them to score high marks, so pedagogical knowledge can be used to consider how a teacher can teach in the class (Tsafe, 2013).


## 2.4.1 Definitions of pedagogy

The term pedagogy is derived from two Greek words of paid meaning "child" and a (Agogus) which means "leader of". Thus, it means the art and science of teaching children (Tsafe, 2013). General pedagogical knowledge involves "broad principles and strategies of classroom management and organization that appear to transcend subject matter" (Shulman,1987, p. 8), as well as knowledge about learners, assessment and educational contexts and purposes.

According to Ozdon (2008), pedagogy is the Knowledge about teaching, an understanding of how particular topics, problems, or issues are organized, presented, and adapted to the diverse interests and abilities of learners and the ways of representing and formulating the subject that makes it comprehensible to others,  it is also the science of teaching, instruction and training.

Loughran et al (2012) defined pedagogy as a term that is used in education in a variety of ways and designed to make talk of teaching appear more sophisticated and remote from real life practice, and it has more to do with understanding the relationship between teaching and learning in ways that foster children's development and growth.

AL- Mobayed (2016) defined pedagogical knowledge as the deep knowledge about the methods of teaching and learning and how it encompasses overall educational purposes, value and aims. According to him, PK includes classroom managements, knowledge about techniques to be used in the classroom, the target audience and strategies for evaluating students' understanding.

Nezvalova (2011) defined it as general teaching skills, and it should be developed by all teachers, and there are some pedagogical strategies which include: Planning, teaching methods, evaluation, group work, questioning, wait time, feedback, individual instructions, lecture, demonstration and reinforcement.

Park (2005) mentioned that pedagogical knowledge refers to knowledge about teaching, and it includes: knowledge of learners and learning, knowledge of classroom management, knowledge of instruction and curriculum, knowledge of assessment, and knowledge of educational goals.

According to Kanat (2014), foreign language teaching is a discipline which requires unique knowledge of certain techniques and approaches to motivate and communicate with learners in the target language. Furthermore, pedagogical knowledge is a base consisting of

the knowledge of teaching and learning approaches, method of implementations, teaching and learning strategies, techniques, testing, classroom management and material development.

## 2.4.2 Benefits of pedagogical knowledge:

Berieter (2002) mentioned some benefits for pedagogical knowledge as the following:

1- It encourages metacognition, and therefore, it will develop learners' skills or build learning power.

2- It increases the independence of students and assists students in inquiry based or problem based learning lessons.

3- It helps teachers to plan  lessons well.

4-  It increases teachers' reflection on their classroom.

5- It is an effective form of professional development.

6- It helps develop  teachers' pedagogical content knowledge, so teachers can develop multiple strategies to teach the same topic, understand and identify the misconceptions students are likely to have.

The researcher defined pedagogical knowledge (PK) as the teachers' deep understanding of organizing subject matter and general teaching strategies, processes and practices of teaching and learning. It also includes an understanding of the nature of learners, having strategies for assessing learners and deep understanding about the common theories of learning: cognitive, social and developmental theories. Moreover, it has many benefits to teachers.

## 2.5 Pedagogical Content Knowledge

## 2.5.1 Shulman's concept of PCK

In 1986, Lee Shulman introduced the concept PCK , which was one of the components of CK, and distinguished other two forms of CK including subject matter knowledge and curricular knowledge.

Shulman (1986) term of PCK included the most useful ways teachers represent specific content topics so that learners understand them, and these representations includes analogies, illustrations, examples, demonstrations, metaphors, etc. He originally defined PCK as:

The most useful forms of representations of those ideas, the most powerful analogies, illustrations, examples and demonstrations- in a word, the most useful ways of representing and formulating the subject that make it comprehensible to others…... PCK also includes an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that pupils of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons. PCK here is considered as an affirming subject matter and how to present and translate it into practical teaching. (p.9)

In his definition of PCK, the special nature of subject matter knowledge includes two components, they are: 1- knowing how teachers represent the specific content to the students 2- what these students know or don't know about the content.

In 1987, Shulman extended the categories of knowledge base of teaching in that it includes more knowledge bases to the three forms of knowledge that were proposed in 1986, and PCK was situated as one of the components of teacher knowledge. He refined the definition of PCK as the following: The blending of content and pedagogy into an understanding of how particular topics, problems or issues are organized, represented and adapted to the divers interests and abilities of learners and presented for instruction.

In this definition, PCK represents the blending of CK with PK. He also ensured that teachers must have deep understanding of subject matter for providing alternative explanations of the same concepts for students who have different learning levels and interests. Figure 1 illustrates the PCK framework Shulman (1986) conceptualized.

A teacher's PCK includes attention to aspects or sections that are difficult to learn by learners, so PCK takes into account learners' social and personal background. Teachers therefore restructure lessons accordingly to accommodate any misconceptions so that fruitful learning takes place. Thus, PCK increases as teachers increasingly make use of appropriate strategies for clearer understanding (Laban, 2016).
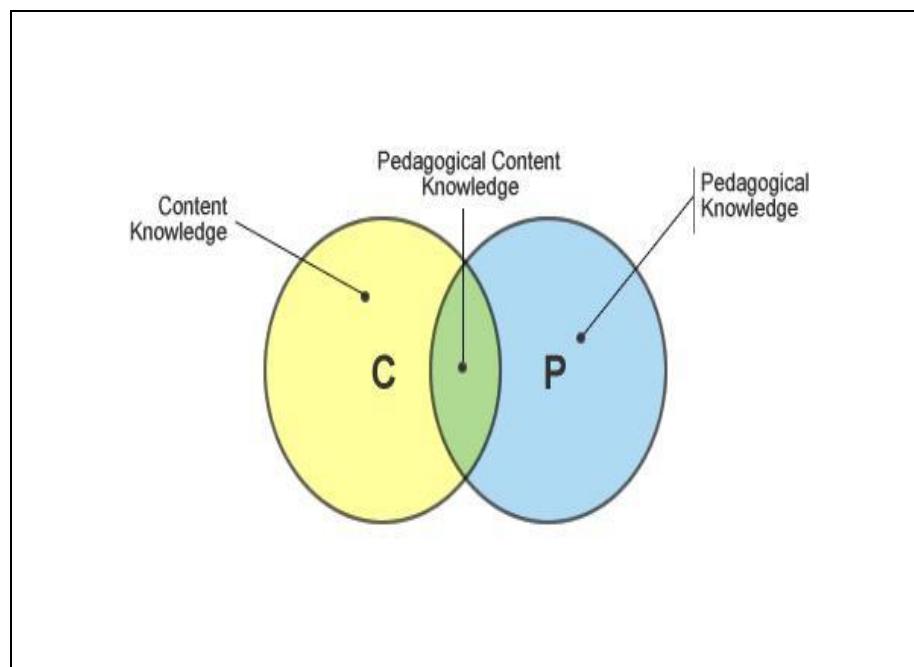


**Figure 1: Shulmans' pedagogical content knowledge framework.**

Shulman's concept of PCK has widely refined many other researchers, for example, Loughran et al (2001) defined it as: the amalgam of CK and teaching knowledge that makes that content better able to be understood through the particular approach adopted, Whereas, Gess-Newsome (1999) defined it as a transformation of at least two components constitute knowledge domains: General pedagogical knowledge and subject matter knowledge. Park and Oliver (2008) defined PCK as teachers' understanding of how to help a group of students understand specific subject matter using multiple instructional strategies, representations and assessments while working within the contextual, cultural and social limitations in the learning environment. However, Cochran and colleagues (1993) renamed PCK as pedagogical content knowing (PCKg) to acknowledge the dynamic nature of knowledge development. It was defined as a teacher's integrated understanding of the four components of pedagogy, subject matter content, how much teachers know their students characteristics and the environment context of learning. In other words, it is the teacher's understanding of environmental surroundings, and this model illustrates the dynamism and explains the development of PCK by expanding the four categories of teacher knowledge (Peng, 2013). Hashweh (2005) asserted that Shulman left the task of further developing the conceptualization of PCK to others and neglected to study interaction among the seven categories of teachers' knowledge. He proposed the following definition: PCK is the set or repertoire of private and personal content specific general event-based as well as story-based pedagogical constructions that the experienced teacher has developed as a result of repeated planning and teaching of, and reflection on the teaching of, the most regularly taught topics.

Park and Oliver (2008) mentioned that the differences among scholars occurred with respect to the components they integrate in PCK and to specific labels or descriptions of these components. However, most scholars agreed on Shulman's (1986) two key components of PCK: a) knowledge of instructional strategies incorporating representations of subject matter and response to specific learning difficulties and b) student conceptions with respect to that subject matter.

PCK has been described in different terms such as: transformation, translation, combination,etc. Moreover, the researchers have used different domains of PCK like: CK, PK, knowledge of learners, etc., ensuring one or two components of PCK depending on their view and beliefs of PCK.

Teachers' knowledge is a sufficient condition for successful learning. It includes content knowledge and pedagogical knowledge. Some teachers have good content knowledge but they lack pedagogical knowledge, or otherwise, they have pedagogical knowledge but lack content knowledge. Therefore, teachers must possess both content knowledge and pedagogical knowledge and combine between them in instructional practices, and that is called pedagogical content knowledge (PCK).Teachers use their PCK to select the most appropriate instructional strategies for better understanding of students. PCK includes three concepts: knowing what to teach, how to teach and how students learn in a variety of conditions .

## 2.5.2 Conceptualizations of PCK building on the work of Shulman:

Many researchers take on the work of Shulman. Grossman (1990), as cited in Gencturk (2012), was the first one who expanded upon Shulman's ideas. She reorganized the seven categories defined by Shulman into four general areas of teachers' knowledge and they are: 1) knowledge of subject matter which is a teacher's knowledge of the content to be taught, and it includes syntactic and substantive structures. 2) general pedagogical knowledge: It includes generic, instructional strategies, that might be applicable in a wide variety of educational settings. 3) pedagogical content knowledge linking content knowledge with pedagogy and it takes four forms: conceptions of purposes for teaching subject matter, knowledge of students' understanding, curricular knowledge and instructional strategies. 4) knowledge of context includes the knowledge of the school setting and the knowledge of learners in particular classrooms.
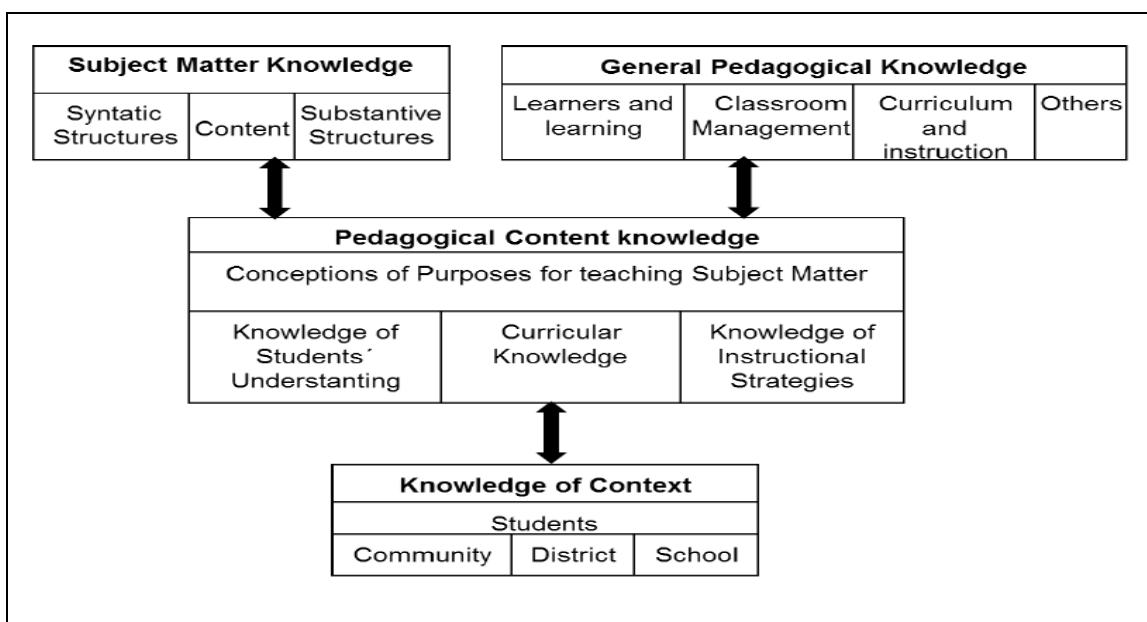


**Figure 2: Grossmans' model of PCK (p.5).**

Cochran et al (1993) criticized the understanding of teachers' knowledge as a static entity, they asserted that teaching process has dynamic nature and requires several components like: pedagogical knowledge and subject matter knowledge. They mentioned that PCK should be stated in constructivist perspective and they prefer to use pedagogical content knowing (PCKg) to reflect its dynamic nature. They defined it as a teachers' integrated understanding of pedagogy, subject matter content, students characteristics and environmental context learning with the transformation of the knowledge components occurred in real time while they form PCKg in teaching context. Figure3: Cochran and others (1993)s' PCKg model.
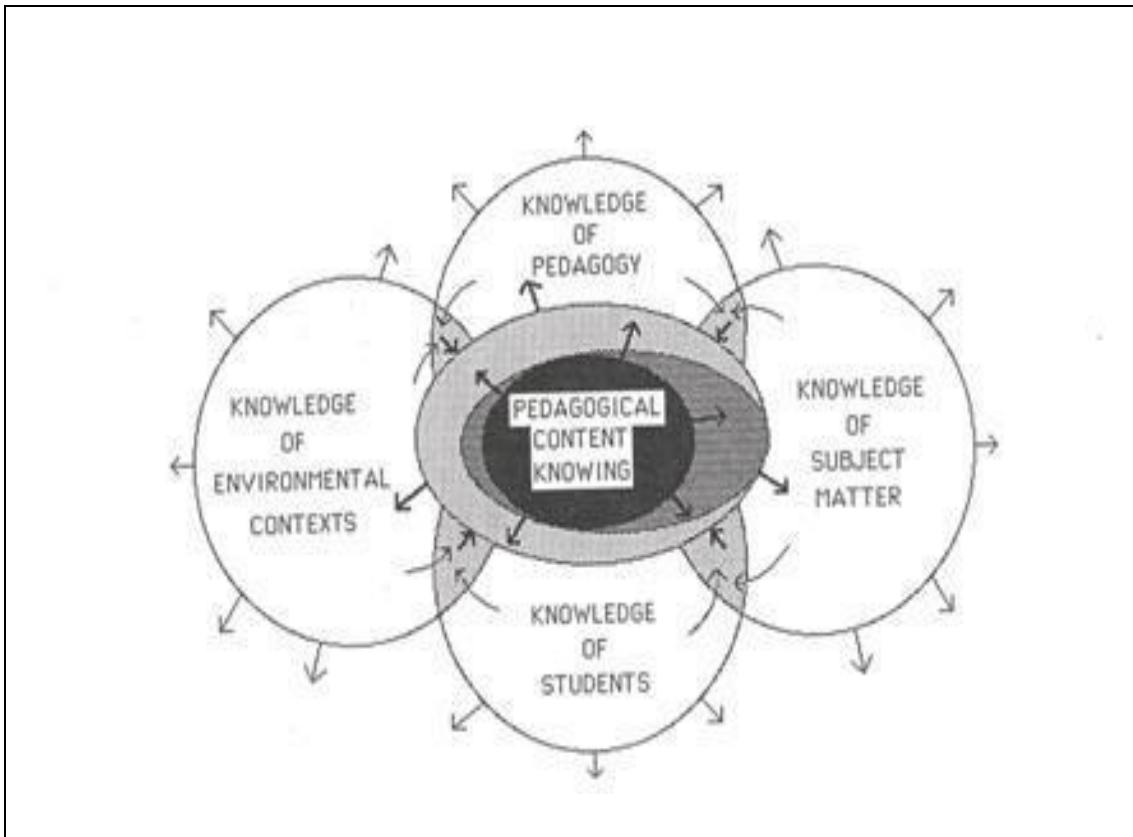
**Figure3: Cochran and others (1993)s' PCKg model**

Magnusson and colleagues (1999) model: which emphasized the components of PCK for teaching science, and this model basically followed the Grossman's work adding assessment knowledge as a component of PCK. Moreover, in this model the concepts of purposes for teaching content presented in the Grossman's model are replaced by orientations for the teaching of science in Magnusson and colleagues (1999). Their model consisted of five components which are: a) orientations toward science teaching: b) knowledge and beliefs about science curriculum: c) knowledge and beliefs about assessment in science d) knowledge and beliefs about students' understanding of specific science topics and: e) knowledge and beliefs about instructional strategies for teaching science. Figure 4 shows Magnusson et al. (1999) model of PCK.

The component of orientation to science teaching refers to teachers' knowledge and beliefs about main science teaching. This knowledge serves teachers as a conceptual map that guides pedagogical decisions about topics.

The second component of PCK is the knowledge and beliefs about science curriculum, and this component has two categories: mandated goals and objectives, and specific curricular programs and materials. They consider curriculum knowledge as a part of PCK because they believe curriculum knowledge is among the knowledge that distinguishes the content specialist from the pedagogue. Knowledge of mandated goals and objectives which is defined as the knowledge of goals and objectives for students in the subject they are teaching and the expressions of these guidelines through the topics addressed during the educational year. Whereas, knowledge of specific curricular programs includes knowledge of programs and materials that are relevant to teach a particular topic.

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Knowledge of students' understanding of science is the third component of the Magnusson and his colleagues' PCK model , which means that teachers should have knowledge about the learners to help them develop specific scientific knowledge. This knowledge has two categories: knowledge of requirements for teaching, which includes teachers' knowledge and beliefs about prerequisite knowledge for learning specific knowledge and knowledge of the abilities and skills which students may need to learn specific concepts. It is essential for the teacher to know that students differ in their abilities levels, needs and learning styles, so, she\ he is expected to know the learners' individual differences and provides opportunities to the students with different needs. Also, knowledge of areas of students' difficulty in learning EFL which returns to teachers' knowledge of the causes of these difficulties.

Knowledge of assessment is the fourth component of Magnusson and colleagues (1999). It has two categories: knowledge of dimensions of science learning which refers to knowledge of the aspects of students' learning that are important to asses for a particular topic, and knowledge of methods of assessment which is the knowledge of the method that is suitable to use in assessment to the specific aspects of students learning which are important for a particular topic.

Knowledge of instructional strategies is the fifth and the final component of Magnusson and colleagues' model of PCK, which has two dimensions: knowledge of subject specific strategies and knowledge of topic specific strategies. The first includes general approaches used during performing, and the second is applied to help students comprehend specific science concepts, and this knowledge also has two categories :representations and activities.

Magnusson and colleagues (1999) affirmed that the components of PCK should function as a unity to teach science effectively and any deficiency in coherence, the components results in problems in developing PCK and using PCK in classrooms.
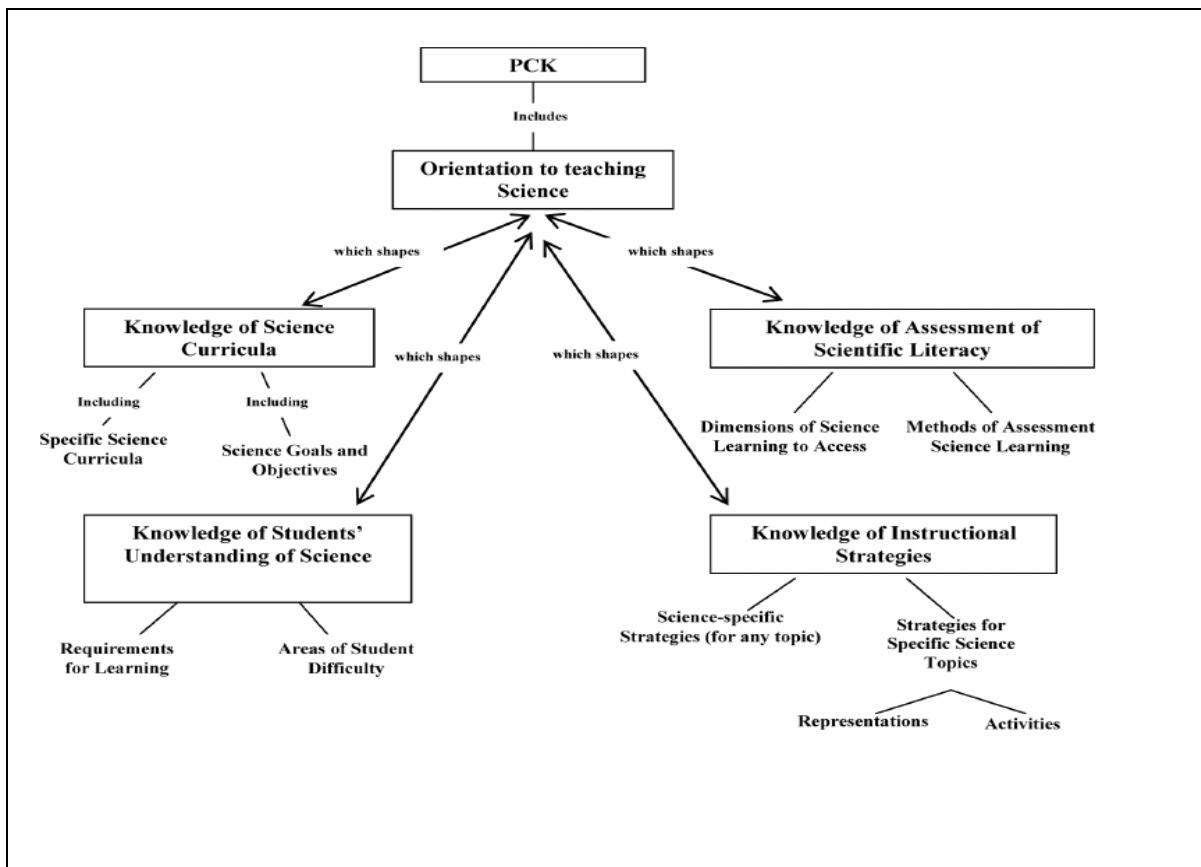
**Figure 4. Magnusson et al. (1999) model of PCK p. 99.**

More recently, Ball and colleagues (2008) have elaborated on Shulmans' concept of PCK (1987) from the perspective of Math's education as shown in the figure 5.
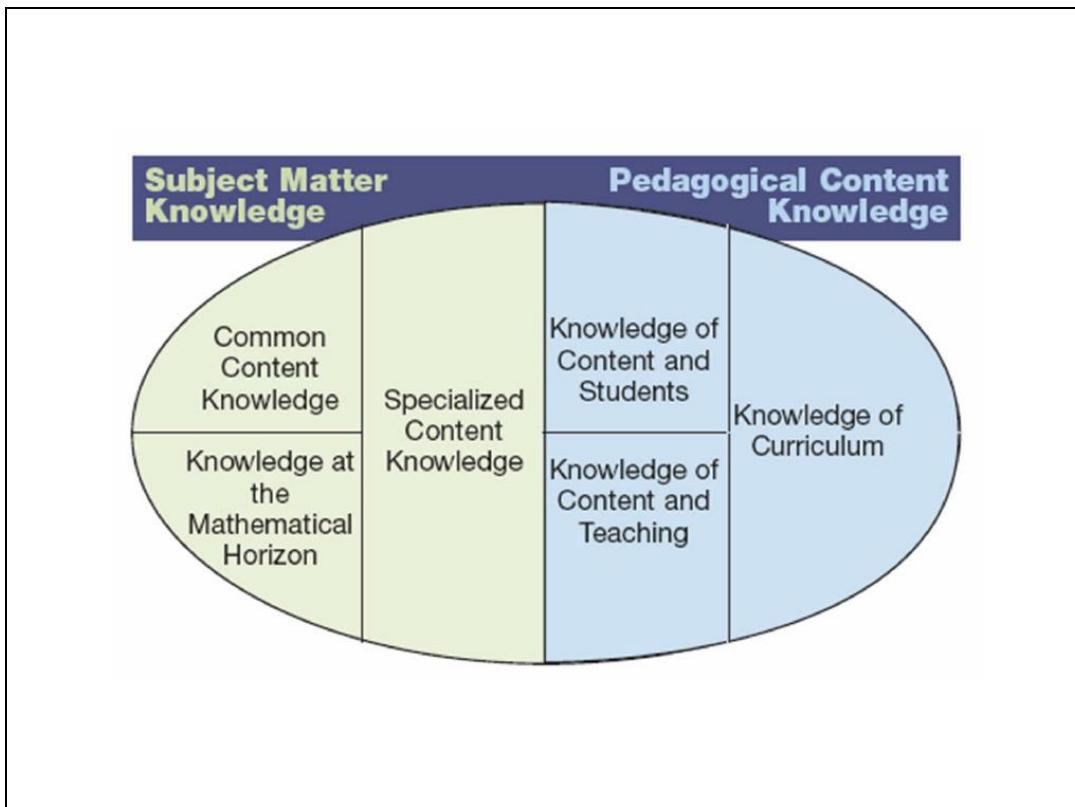


**Figure 5: Ball and colleagues' model of PCK (2008) p.403**

Within the domain of subject matter knowledge a differentiation is made among three forms of knowledge: 1) Common content knowledge (CCK) which is the subject – specific knowledge needed to solve mathematics problems, and they called it a" common" because this kind of knowledge isn't specific to teaching- non teachers are likely to have it and use it. 2) Specialized content knowledge (SCK): It is described by Ball et al (2008, p. 9). as "mathematical knowledge and skill unique to teaching". 3) Horizon content knowledge which means" an awareness of how mathematical topics are related over the span of mathematics included in the curriculum", in other words, teachers' overview of all topics that are taught within a subject, and how these topics conceptually relate to each other (Bremmer, 2015).

Within the domain of PCK a differentiation is made among three forms of knowledge and they are: 1) Knowledge of content and student (KCS) which combines knowing about students and knowing about mathematics. 2) Knowledge of content and teaching (KCT) which combines knowing of teaching and knowing of mathematics. Bremmer (2015) mentioned that teachers choose specific examples to explain topics to deepen the understanding of students. 3) Knowledge of content and curriculum . Ball (2008) included this domain but he never described it explicitly. According to Bremmer (2015), the researchers aren't sure whether this form of knowledge is part of PCK or is a category in its own right.

Another model is proposed by Park and Oliver (2008) and it consists of six components. According to this model, it can be noticed that PCK is at the center, and this makes it

different from the PCK model of Magnusson et al (1999). They added additional component which is teacher efficacy. They indicated that PCK can be developed from any of the other components if we put it at the center. So, the development of one component could affect the development of the other components. Therefore, improving one component could have impact on overall PCK. They stated that the shortage of coherence among the components can make problems in developing PCK and increased knowledge of a single component may not be sufficient to stimulate change in practice. Figure 6 shows Park and Oliver's model (2008) of PCK.
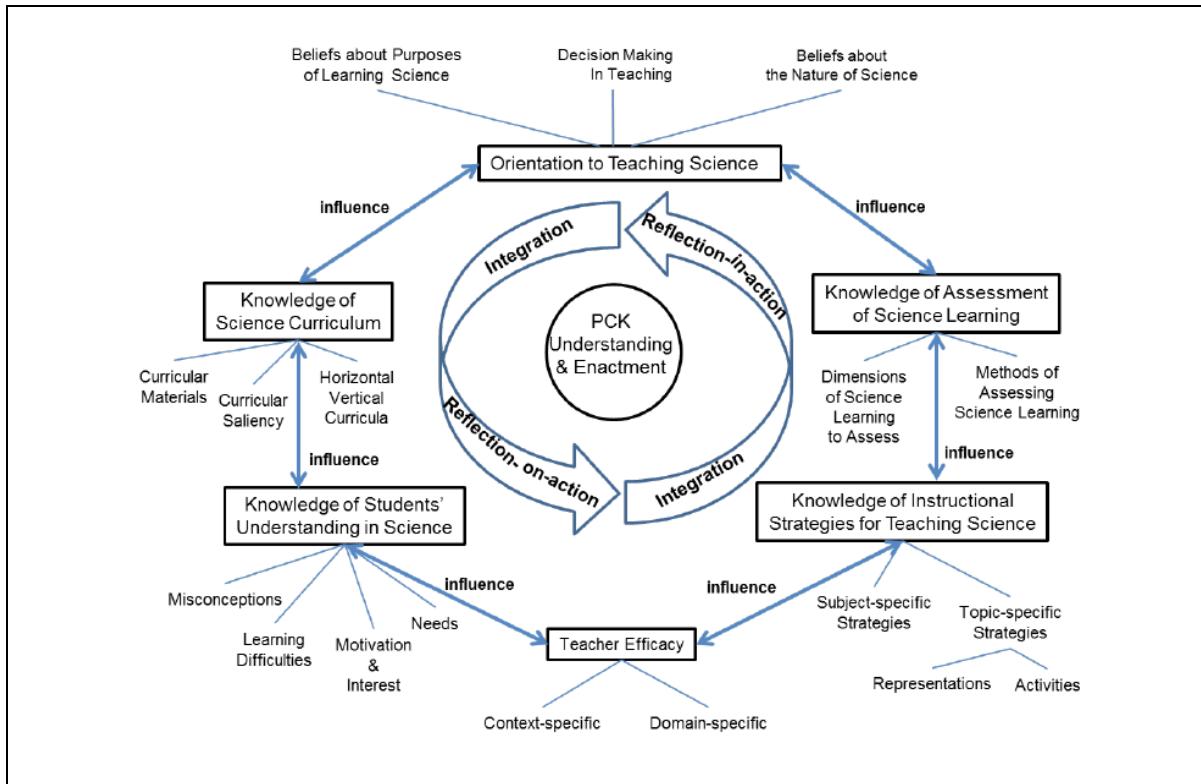


**Figure 6: Park and Oliver's model (2008) of** PCK p**.279**

In the field of English as a second language, some scholars have discussed the components of PCK. In a study for Setiadi and Musthafa (2013) on English teachers in Indonesia, they mentioned that PCK includes: Content knowledge, understanding of students conceptions and preconceptions, general pedagogical knowledge, curriculum knowledge, knowledge of educational contexts, knowledge of educational goals, knowledge of assessment and evaluation, and the use of assessment and evaluation results for instructional purposes.

Faisal (2014) mentioned that the proposed components of PCK in his study are: teachers' knowledge of curriculum, subject matter, learners and pedagogy. He explained them as follows:

- **Knowledge of curriculum**: It is important for teachers to know and understand what the intended curriculum objectives are, so that they can tailor the materials, as well as plan, execute and evaluate the instructional practices, and how to integrate scientific approach on effective teaching of writing appropriately. Therefore, teachers need to possess this knowledge to help learners achieve the learning objectives in curriculum documents.

- **Knowledge of subject matter**: It means what teachers need to know about the language teaching. In addition, it deals with their knowledge of the subject including the formal aspects of English like syntax, phonology, grammar, written and spoken language use and comprehension, as well as discourse. He mentioned also that the subject matter corresponds closely to the materials that teachers have to deliver to students. In teaching writing, it requires teachers to possess adequate knowledge as vocabulary, text structure, sentence formulation and paragraph development

- **Knowledge of learners:** Learners were considered as an empty vessel which should be filled by teachers and they became passive participants and listeners in the learning process. Also, the teacher-centered learning model has been replaced by student-centered learning which needs teachers to understand their learners come in the class with various levels such as ability and motivation . Knowledge of learners refers to the knowledge of their characteristics, such as their needs, learning styles, motivation as well as social and cultural background( Shulma,1987).

- **Knowledge of pedagogy:** PCK deals with knowledge of teaching acquired through years of process and experience, therefore, the understanding of pedagogy develops along with the practice a teacher undergoes. This results in various definitions and conceptions being proposed by scholars, such as Shulman (1987) who defined PK as the broad principles and strategies of classroom management and organization that appear to transcend subject matter.

It appears that researchers have elaborated on Shulman's (1986) (1987) concept by identifying the constituent components based on their beliefs or the results from empirical studies. However, most researchers agree on Shulman's 1986 two key components of PCK a) knowledge of instructional strategies incorporating representations of subject matter and understanding of specific learning difficulties and b) the learners' conceptions with respect to that subject matter (Park, 2005) ( Dijik & Kattmann, 2007).

The harmonization of all types of these components might yield effective teaching practices. However, a teacher doesn't immediately achieve that harmony among them that would facilitate their teaching practices as well as enhance his/her students' learning. It requires continuous efforts to balance among content, students, curriculum, educational goals and assessment tools (Kilic, 2009). In fact, effective teachers have to develop knowledge with respect to all of the aspects of PCK and with respect to all of the topics they teach (Magnusson et al, 1999) (Park, 2005). The shortage of coherence among components can make problems in developing PCK and increased knowledge of a single component may not be sufficient to stimulate change in practice (Park & Oliver, 2008) (Park, 2005).

All the mentioned scholars somehow developed Shulman's PCK concept. They either compared more than one type in the PCK or added new ones. They all agreed that PCK is much more complicated than what Shulman says, and so they have worked to construct a more complex concept for PCK.

### 2.5.3 Development of PCK

PCK can develop in multiple ways. Several scholars have distinguished sources that contribute to PCK development. Hashweh (2005), Park and Oliver (2008), Ibrahim (2016) believed that the development of PCK is a continual process, growing through reflective practice, whereas Grossman (1990) , Cochran et al (1993) Van Driel et al (1998) and Ibrahim (2016) all recognized that PCK develops through continued experienced teaching, because teachers derive PCK from their own practice and formal training. Besides the experience, teachers' PCK is generated from their personal development, and surrounding colleagues (Walker, 2016). Cochran (1993) said that the novice teachers developed PCK through in-service professional development programs that fostered the growth process.

Park (2005) have identified several sources of PCK development; they include: teaching experience, professional development programs which include workshops, educational course work, professional conferences, knowledge of students' understanding, subject matter knowledge and observations of classes. The nature of PCK development appears in the following areas: a) PCK develops over time as an outcome rooted in classroom practice b) while teaching experience is a major source of PCK development, adequate subject matter knowledge is prerequisite of PCK development c) PCK development is promoted by increased understanding of student's preconceptions, learning difficulties and reasoning types in specific domain, and d) the sources of PCK development interact in a complex way (Park, 2005).

The researcher concluded that the teacher can develop his\her PCK through many ways such as long duration in teaching, through it, a teacher can gain and develop his\her instructional practices, understand his\her discipline, and understand his\ her students. In addition, attending professional development programs can develop the teacher's PCK if he\she is trained by professional people.

### 2.5.4 Assessment of PCK

There are many difficulties in assessing teachers' cognition such as: a) this concept is vague because scholars use this term to refer to different constructs including beliefs, knowledge, reflections or self- awareness. b) the teachers' cognition can't be assessed directly for many reasons which include: the cognition is regularly unconsciously held, teachers are often unable or unwilling to represent it accurately. Thus, it is so important to access teachers' cognition in an indirect way. For example, through extend interviews, observations of teachers' performance and then make inferences from what they say, intend and do (Park, 2005).

Because the nature of PCK is complex, using one instrument to assess it is not enough. Thus, a multiple method approach is necessary to study PCK, and the process of assessment is hard and fraught with dangers. It requires assessing all aspects of what a teacher knows, what he/she does, and the reasons for the teachers' actions. In addition, the multiple methods allow triangulation of data (Park, 2005) (Alexander, 2016).

Researchers have developed multi model approaches to evaluate teachers' PCK that include: multiple-choice questions, concept mapping, structured/ semi structured interviews, stimulated recall interviews, pictorial representations, self-reports, surveys, video observations, written reflections, and combinations of these (Park, 2005) (Zhou, 2015) (Alexander, 2016).

The multiple method was criticized because it is inherently time- consuming and labor-intensive for both data collection and analyses ( Park, 2005) ( Zhou, 2015). Also, the concept mapping needs the interpretations of involved coding system, while in the interview, participants may not possess the language to express their ideas and its process generates lengthy transcript to be analyzed (Zhou, 2015).

For this study, the researcher used two instruments to assess teachers' PCK. They are a questionnaire and an interview. The reason for using multiple sources was to have triangulation in order to strengthen the validity and reliability of the study and its results.

## 2.6 Professional Development

Good teaching is not an accident, it is the result of study, reflection, practice and hard work, and the teacher cannot know enough about how a student learns, what impedes the students' learning and how the teachers' instruction can increase the student's learning. Therefore, there is global awareness of the importance of teacher- training in general and special training for English language in particular. EFL teachers need to be able to deal with many kinds of skills in order to be effective in teaching. They have to be fluent in listening, speaking, reading and writing and they have to understand their own culture and English culture to be familiar with the similarities and differences between English culture and their own (Zuheer, 2013). Thus, the professional development is the only way to gain such knowledge, and whether students are high, low, or average achievers, they will learn more if their teachers continually engage in high- quality professional development (Mizell,2010).

According to Hartono (2016), professional development is a process that has been referred to efforts to improve teachers' quality through some activities aimed at improving teachers' knowledge, skills and attitudes. These activities were classified in formal and informal activities. The formal activities include: conferences, seminars, or workshops, collaborative learning among members of a work team, or a course at college or university, informal activities include: discussions among work colleagues, independent reading and research, observations of a colleagues or other learning from a peer (Mizell, 2010).

Professional development (PD) also viewed as a continuous process which emphasizes that the person grows inwardly through a combination of education and experience. Therefore, a teacher has to acquire confidence, gain new perspectives, increase knowledge, discover new methods and take new roles (Zuheer, 2013).

Abu Shoqair & Abu Shaaban (2013) defined PD as an ongoing process of learning by using multiple educational sources for the teachers to improve their performance, to keep their competencies up-to-date and to achieve the objectives of teaching successfully.

Professional development is a training that is given to teachers to improve their knowledge, skills, competence, effectiveness and other characteristics through activities given to them, and PD has many forms like workshops, collaboration among schools or teachers across schools, or courses at university.

## 2.6.1 Why do teachers need professional development?

According to Mizell (2010), university and college programs can't provide the extensive range of learning experiences for graduates to become effective teachers, and new teachers take years to gain the skills they need to be effective in their roles, they face a number of issues like classroom management, instruction, curriculum, school culture and operations, test preparation and administration, parent relation and interaction with other teachers. Even the experienced teachers face many challenges each year such as: changes in subject content, new instrumental methods, advances in technology, changing laws and procedures, and student learning needs. Therefore, the importance of professional development lies in the fact that it provides teachers with the following:

1- It is essential for all teachers no matter what discipline they teach to cope with daily teaching problems and the diversity of students in the classroom (Hartono, 2016).

2- Teachers can gain professional knowledge, specialized skills and personal experiences which they are the ingredients of being an effective teacher, and that will lead them to an improvement in teaching and an increased student achievement (Hartono, 2016) ( Darling-Hammond et al, 2009).

3- Professional development activities affect changes in teachers' classroom practices, which in turn affect changes in student learning outcomes, and these in turn lead to the changes in teachers' beliefs and attitudes (Hashweh, 2005)

4- It impacts teachers' behaviors and students' achievements (Darling-Hammond et al, 2009).

5- Effective PD has a positive change in teaching practice, an increase in teacher content mastery and student achievement. (Pitmann, 2015).

It is clear that PD is vital for teachers and plays an important role in successful education improvement. What is more, there are a lot of benefits for teachers' PD programs, it influences teachers' practices in the classroom, it affects the learners' achievement, and it enables them to gain new knowledge, skills and abilities.

## 2.6.2 Teachers' professional development strategies and models:

There are various kinds of PD strategies that are suitable for teachers' development and training and some of them depends on the teacher himself and others can be done with cooperating with others, Zuheer (2013) mentioned some of these strategies as follows:

1) Peer coaching: It is a PD strategy through which teachers observe, assist and support each other for the purpose of refining, learning new skills or solving classroom- related problems to improve teaching.

2) Teaching Diary (Learning Diary Sheet): It is a kind of reflection in which a teacher records ideas, problems, events, positive or negative for the purpose of PD. It also includes ideas and notes that a teacher needs to remember or analyze and take action in the future.

3) Reflection: Is a skill involving observation, asking questions and putting facts, ideas and experiences together to add new meaning to all of them. And through reflection teaching, EFL teachers can not only solve problems existing in the teaching process, such as low efficiency of language or lack of awareness of ding teaching research but also they can achieve a better understanding of teaching and learning process and they can evaluate their performance continuously.

4) Cooperative learning strategy: A strategy that depends on the exchange of information among group members, where each participant in the group is held responsible for his learning and responsible for learning the other members as well.

## 2.6.3 EFL teachers' special needs

EFL teachers need to be able to deal with so many related skills in order to be effective in teaching. They have to be fluent in listening, speaking, writing and reading. In addition, they have to be intercultural knowledge. This means that they have to understand their own culture, and English culture to be familiar with the similarities and differences between them. Therefore, English teachers' training programs should provide teachers with confidence in themselves, enhancing teachers' understanding of educational technology, understanding students' learning, understanding their discipline, provide them with appropriate choices of goals, objectives, materials, strategies and assessments to help as many teachers as possible to learn and develop in skills , abilities and content knowledge (Zuheer, 2013).

For language teachers, PD is not just imposing fresh language teaching theories, methodologies and teaching material, but also it's a process of refreshing and reshaping teachers' existing knowledge, beliefs, morals, practices and reflections. Also, foreign language teachers specially need to have sufficient knowledge of language which include pronunciation, vocabulary, grammar, pragmatics and psycholinguistics (Hartono, 2016). Moreover, Teachers need to acquire deep and flexible organized understanding in the areas of subject matter, pedagogy and context. In addition, they need to develop a framework that enables them to develop PCK through learning from experiences, and knowledge

should be taught to teachers in training to develop more quickly the skills and knowledge they need to be effective teachers (Dijik &  Kattmann,2007).

Effective PD develops  teachers' content knowledge and affects practice and student learning, so the programs of PD should have principles to guarantee the fruitful results in changing these practices, Darling-Hammond et al (2009) discussed some principles for designing PD programs. They are:

1) PD is ongoing, intensive and connected to practice affording teachers time to analyze critically their teaching practices and content. When PD is connected to practice and embedded in school day, teachers are afforded the space for trying out new practices in their classrooms, evaluating and reflecting on the results.

2) PD focuses on student achievement: it improves teachers' practice and students' learning outcomes, because PD content is more meaningful to teachers connecting their teacher practice to student learning needs.

3) PD should align with school improvement initiatives because teachers need to be supported in their own learning efforts and if new strategies and practices are not supported in their school setting, teachers are less likely to use them.

4) PD focuses on collaboration: teachers can build shared knowledge, expand their teaching capabilities within these collaborative environments and influence positive student learning out comes.

The continual development of teachers is important to improve the quality of teachers and teaching, and to stay in line with trends, issues and research in their field. Moreover, it influences teachers' practice, instructional skills and students' learning outcomes.


## 2.6.4 Teacher training and teacher professional development in Palestine

Palestinian teachers face many problems related to teacher preparation and lack of administration and supervisory support, resulting in a fragmented educational system that impairs contribution and efficiency in the educational process. The Palestinian Ministry of Education and Higher Education has tried a number of things, including in-service teacher training and curriculum revision to improve and develop the educational system in Palestine (Dajani, 2017).

The Ministry of Education and Higher Education (MOEHE) declared strategies for teacher education and training, based on a belief that teachers are the most influential factor in the education process, and that high quality professional development programs (TPDP) needed for enhancing education. These programs are designed to  compensate for teachers' lack educational knowledge, and enhance their skills in teaching and develop their capacities in areas such as: students assessment, teaching methods and instructional materials development, in addition, they emphasize the importance of their role in affecting students' achievements (Khalili, 2010).

According to (Dkeidek et al, 2017), the Ministry of Education and Higher Education adopted the professional standards which were developed by the commission for

developing teaching profession (CDTP). The term "standards" refers to statements of judgmental regarding which behaviors and practices reflect desired values, attitudes, thinking styles, problem-solving and decision- making abilities. These standards are considered as the guidelines which indicate the quality of performance.

## 2.6.5 Aims of the professional development program:

Dkeidik et al (2017) mentioned the aims of professional development program as follows:

1- Developing teachers' understanding about the trends of classroom teaching and learning including the content and pedagogy of the teaching and learning strategies.

2- Providing the teachers with opportunities to develop personally, professionally, and socially.

3- Developing leadership skills and ability to work with other classroom science teachers.

4- Developing a culture of continuing professional development among elementary science teachers.

## 2.6.6 The significance of the professional development program

Dkeidik et al (2017) pointed out the significance of the professional development program as follows:

1- Designing a training program for professional development of classroom teachers, which will support educators in identifying ways in which technology can enhance classroom practice, improve student achievement, and contribute to the teacher and student productivity.

2- Advocating new standards in classroom teacher education that reflect the current and up-to-date vision of the content, classroom environment, teaching methods, and support necessary to provide high quality education for all students.

3- Developing learning materials for both students and teachers based on how students learn and how teachers teach.

4- Research on classroom learning environments, on instructional techniques implemented and on the ability of the students' to develop inquiry oriented skills.

2- Developing learning and teaching strategies with the goal of varying the classroom learning environment, making subjects more relevant to the learner, by offering students frequent opportunities to express their point of view and direct discussion, offer space for the children to make decisions over their work, providing opportunities to collaborate with their peers, and offering construct tasks so as to allow students to express their intrinsic creativity. And introducing new assessment tools and techniques

such as portfolio, case-study, journals, field work, etc. to be implemented by the science teachers to achieve the intended learning outcomes. ( Dkeidik and others, 2017).

## 2.6.7 The professional development program

Dkeidik et al (2017) used a model of seven core competences and their sub-competences which composed the professional development program for elementary science teachers in Palestine. The model proposed the following core competences, which are important for the elementary teacher, and in consistent with Palestinian Professional Standards for Teachers:

1- Facilitating student-centered teaching and learning

2- Building up partnership within and outside the school

3- Monitoring and evaluating the teaching and learning process and its outcomes.

4- Seeking for continuous professional development

5- Sharing in designing beauty learning environment

6- Designing teaching learning materials and resources and utilizing them.

7- Counseling and guiding learners

According to Dkeidik et al (2017), the training modules are delivered and implemented according to the following methodology:

1- Face-to-face meetings between the elementary teachers and faculty members from the department of science education at Al-Quds University once a week. During these meetings the faculty members trained the teachers according to the above modules using discussions and discourses training methodologies. These meetings were held at Al-Quds University.

2- On-line training that is composed from two forms: a) Synchronous, and, b) Asynchronous discourses: An online forum was built. The trainees were reflected about the training and their experiences in their classes while they used the new teaching strategies that they earned form the face-to-face meeting. Moreover, they exchanged their experiences between themselves, something to what is called peer-learning technique.

3- Learning circles in the schools: These circles were also held once a week, regularly at the end of the week, to discuss different activities and issues. The trainees presented in these meeting, in front of the whole group, their teachings ideas, their reflections, feedback, and any other issues that they would like to share with their peers.

4- Field visits: The elementary science teachers were invited to visit a selected nearby ideal schools, they observed some ideal lessons, workshops, laboratory lessons, etc. At the end of each visit, a discussion was held in order to feedback on what they observed, and how

they could benefit from it. The aim of these visits was to provide other pedagogical content knowledge experiences for the trainees.

## 2.7 Related Studies about PCK

This section includes previous studies about teachers' PCK.

Al-Jaro et al (2017) conducted a study to analyze the PCK in the curriculum of English Teacher Education Program (ETEP) at the faculty of Education of University in Yemen. This study analyzed the content of the curriculum courses so as to visualize the way student and teachers translated what they had learned into pedagogical practices. The curriculum content of ETEP is qualitatively analyzed using the inductive approach which has eight steps: 1) research question, theoretical background 2) category definition and level of abstraction 3) coding the test 4) revision 5) final coding 6) main categories 7) intra\ inter-coder check 8) results. The analysis revealed that pedagogical skills courses are not enough to enhance and strengthen the student teachers' PCK needed to be reflected in their teaching practices. The findings showed that the curriculum lacks courses necessary to provide teachers with basic knowledge and pedagogical principles which are of vital significance to demonstrate their understanding before they are practically engaged in the teaching experience.

Sanoto (2017) conducted a study to determine the reading experience, habits and literature teaching practices of in-service teacher trainee and to explore their PCK in primary schools in Botswana. The sample of the study consisted of 19 teachers. Data was collected through questionnaire, interview, documentary data and lesson observation. Results showed that the source of knowledge base and the colleges of education curriculum didn't lay a foundation for a solid knowledge base. This is with regard to in-service teacher trainees' PCK, who taught literature without students reading the literary texts. This anomaly denied the trainees an opportunity apply critical thinking in analysis of texts and by extension they failed to see the significance of fostering critical thinking and an appreciation of reading in their (ESL) pupils. The data further revealed that the teachers are frustrated by a lack of resources for leisure reading in the schools, which adversely affects not only their efforts to inculcate a culture of reading, but also a positive attitude towards reading and teaching literature at primary school level.

Laban (2016) carried out a study in order to understand PCK of teachers teaching Shakespeare to establish beliefs of these teachers and identifying the influence of beliefs on the practice of teachers in South Africa. The sample of the study consisted of four teachers. Data was collected through interviews and one lesson observation with each of the four teachers. The PCK of the four teachers was analyzed according to the cycle of Shulmans (1987). The research revealed that the PCK of these teachers was at different development stages. It was evident that PCK increases through experience. Another imperative finding was that reflection and new comprehension the last two stages of the cycle, were not always apparent with the teachers. It is significant that the steps of the cycle seemed to overlap. The research concluded that the teachers were enthusiastic and great admirers of Shakespeare. However, it was not always easy to translate their own enthusiasm into productive strategies of teaching. There was a definite challenge for teachers and learners.

The socio-economic constraints of learners coupled with the beliefs of teachers influenced the development of the teachers' PCK.

Ibrahim (2016) implemented a study in Banda Aceh\ Indonesia to find out how well English teachers displayed PCK in teaching English and how they developed their knowledge of teaching. The sample of the study consisted of four English teachers. The instruments used for collecting data were observation sheets and interview guides. The results of the study showed that teachers each had own strengths and weakness in teaching English. All teachers taught different topics and they showed dissimilarities in displaying PCK. Based on observations, those teachers are still weak regarding PK and knowledge of learners' category. Although the teachers teaching strategy were in the context and the right teaching tracks, the creativity of teaching approaches still needed to be developed. Further, the knowledge of learners tended to be poor since the teachers did not show the engagement between the teacher and his/her students, they put lack attention and interactions to solve students' problems and misconceptions in understanding the subject. All teachers had limited knowledge of how to identify the conceptions of the learners even though they had had many years of experience as English teachers. The differences in teaching knowledge among teachers could be caused by many factors such as different methodologies used, different material status and different language backgrounds of the students. This study showed that English teachers still needed to improve their PCK.

Al- Atrash (2016) conducted a study to evaluate the basic stage Arabic language books in light of the pedagogical content knowledge from the teachers' point of view in Hebron District. The sample of the study consisted of 345 teachers. The instrument used for collected data was a questionnaire. Results of the study showed that the degree of teachers evaluating of Arabic language books has come moderately, and the domain knowledge goals and philosophies was the highest mean, followed by the field of activities and evaluation, followed by general pedagogical knowledge, knowledge structural components of the content and the domain of knowledge of the learning context and characteristics of learners. The results also showed that there were no statistically significant differences in the evaluation of Arabic language books for the basic stage in light of pedagogical knowledge due to gender, except the knowledge domain of goals and philosophies, in favor of females. There were no statistically significant differences due to educational qualification variable, exception of general pedagogical knowledge, in which the differences between the bachelor and diploma in favor of B.A. Also there were no statistically significant differences due to the variable specialization or teacher experience.

Pitmann (2015) examined English Language Arts teachers' experiences in district mandated Professional Learning Communities (PLC) as a form of professional development. These (PLCs) followed the professional learning communities at work. Also, the study explored the affordances and limitations of the PLCs for developing these teachers' PCK in North Carolina. The sample of the study consisted of three of English Language Arts (ELA) teachers. Data was collected through focus group interviews, personal interviews and classroom observations. Results showed that teachers' reported PLC topics of conversation didn't mesh with PLC meeting observations. In addition, there was no observed change in instructional practices as a direct result of teachers' PLC involvement. Teachers imbalanced data collection and data use. Teachers collected many forms of student achievement data from various assessments and this data collection drove classroom practices but teachers didn't use their data to evaluate and change instructions. The results showed also that PLCs lacked an important component collaborative inquiry which could potentially contribute to the development of these teachers' PCK. ELA

teachers met collaboratively in their PLCs and shared knowledge: Still, these meetings didn't appear to positively impact the development of the teachers' skills or build the knowledge they needed for teaching more effectively. Also there was a little evidence of the ELA teachers reflecting deeply on their practice or engaging in collaborative inquiry that would influence their instructional practice.

East (2015) implemented a study in Florida to investigate whether English teachers increased their understanding and using PCK in writing aligned with the Common Core Anchor standards1-6, and examine how they collaborated to advance their knowledge in the area of English Language Learners (ELs) in the classroom. The sample of the study consisted of 15 teachers. Data was collected through interview and observations. The findings indicated that participants recognized various EL instructional strategies embedded in the subject matter of writing. Further, the data indicated that the duel language participants collaborated as an effective means for delivering EL instructional strategies. The teachers in the site school incorporated various EL instructional strategies that were recognized as effective for teaching ELs. Further, the teachers reported their interviews to infuse writing instruction into their content area in the classroom.

Asl and others (2014) conducted a study to measure (EFL) teachers CK and PCK throughout the years of teaching experience in Maran, East of Azerbaijan. The sample of the study consisted of 115 males and females teachers. The instruments of the study were a survey and questionnaire. The results of the investigation indicated that regretfully a remarkable number of teachers possess much less than expected amount of both CK and PCK, which is also triggered by their amount of teaching experience. That is , the more years they teach, the more amount of CK and PCK they lose.

Kanat (2014) carried out a study in order to investigate pre-service English teachers' perceptions about their PCK through their teaching practices in Turkey. The sample of the study consisted of 69 pre-service English teachers. Data was collected through a questionnaire, interview and observation. The results of the study showed that the pre-service English teachers had positive perceptions about having and practicing their PCK and there were no significant differences in the perceptions could be observed based on gender, experience and success in general. The findings of the study indicated that the pre-service English teachers had positive perceptions about their PCK in general, and their practices generally matched with their perceptions. The findings also showed positive perceptions of the influence of the courses on their PCK.

Sanchez and Borg (2014) conducted a study to examine the interaction between cognitions and context in the grammar teaching practices in Argentina. The sample of the study consisted of two experienced English teachers. Data was collected through classroom observations, semi-structured interview and post-lesson stimulated recall interviews in which the teachers provided the rational for the their grammar explanations. The findings highlighted not only the array of instructional strategies employed by the teachers in their explanations but also the divers and interacting range of pedagogical concerns which informed the choice of these strategies . The results also showed evidence of the influence on teachers' pedagogical decisions of their perceptions of the context in which they worked. The findings also shed light on the nature of second language (L2) teachers' grammar related PCK.

Miqdadi and Al-Omari (2014) implemented a study in Irbid in order to examine Mathematics and Science teachers' perceptions of their PCK in Irbid , and whether their

perceptions vary according to gender, teaching experience, scientific qualification and workshops attendance. The participants of the study were 273 male and female mathematical and science teachers. The results showed that Mathematics and Science teachers' perception of their PCK were weak. Furthermore, the study revealed significant differences in teachers' perceptions due to the scientific qualification and workshops attendance, and significant differences in teachers' perceptions due to the gender and teaching experience.

Setiadi and Musthafa (2013) carried out a study to describe the pedagogical content knowledge (PCK) and teaching performance of junior secondary language teachers based on the tests administered during the teacher certification program, and identify the correlation between both variables in Indonesia. The sample of the study consisted of 124 English teachers. Data was collected through a test to examine pedagogical content knowledge, and a Likert scale-like observation sheet was used to assess teaching performance during peer teaching session. Findings showed that PCK has a strong correlation with teaching performance. However, other factors such as employment status, academic qualification, and age had significant effects on the mastery of those two main variables. The results showed that public school teachers tended to get higher mean scores than private school teachers. Also, it was found that PCK was attained by teachers with higher degree of education or academic qualifications, so Master degree holders had higher mean scores of PCK than the teachers with B.A degree. Moreover, it was found that young teachers of 31 - 40 years of age possessed a higher level of PCK. It means that age had a moderating effect on the acquisition of pedagogical content knowledge.

Liu (2013) conducted a study to address the patterns and development of PCK for (ESL) teaching in US. The sample of the study consisted of an (ESL) teacher. Based on data collected from classroom observation, interviews and document review, and research gave the insight how teacher elaborate the subject matters into well organized, interesting and accommodate students' needs and ability. The study found that policy and culture are predominated parts in ESL teacher education, the early period contributes more constructively to the formation of PCK, and pedagogical knowledge plays a more active role in teaching ESL. The participant emphasized Pedagogical knowledge (PK) only and the instruction materials did not follow the syllabus. The study suggests that ESL teacher education should provide standardized and easy-to-learn ESL pedagogical knowledge.

Atai and Khazaee (2012) conducted a study to explore Iranian teachers' perceptions of their PCK and their sense of professional identity (PI) as well as to scrutinize how their cognitions were practiced in English For Academic (EAP) classes in Iran. The sample of the study consisted of two English Language Teaching (ELT) teachers and two content instructors from a university in Tehran. Data was collected through observation and semi-structured interview. The results showed that the ELT teachers neither showed much flexibility in their teaching methods and materials nor articulated their willingness to release themselves of the imposed pedagogical limitations. ELT teachers kept to the same traditional approach education. Content instructors seemed to stick to the principles of transformative education by reflecting on their practices, fostering critical thinking in students, attending to their learners' needs, showing flexibility to the learners' criticisms, involving them in materials selection and by using creativity and innovation in their teaching strategies.

Ayoubi et al (2012) conducted a study to explore in-service teachers' PCK improvement after attending the training program in Lebanon. The sample of the study consisted of 116

chemistry teachers, and the instruments that used in collecting data were: pre and post-questionnaire , classroom observations and achievement test score. The results indicated that teachers' beliefs about teaching and learning have changed away from the behaviorist towards more constructivist beliefs and their teaching practices have developed toward using more active teaching strategies.

Yang (2011) carried out a study to explore the integrated PCK and instructional practices exhibited in both native and nonnative English teachers in Taiwan. The sample of the study consisted of four English teachers of the English language center at Taiwan university. Data was collected through observation, interview, document and a survey to investigate students' perceptions of their teachers instructional. Results of the study showed that all four teachers demonstrated eight types of knowledge base in their teaching of Freshman English course which they are: content knowledge, pedagogy, curriculum, learners, contexts, educational goals, self and assessment. It was found that these eight types of teaching knowledge were in nature and in reality inseparable when the four teachers taught the course. With a combined knowledge, the four teachers were found to demonstrate a high level of integrated PCK in their teaching, as evidenced by the materials they selected for the students and the activities they engaged in doing. The four teachers being native or nonnative status was found to weigh for less than their years of experience, professional training and life experiences in influencing their knowledge and instruction of the course.

Hlas and Hildebrandt (2010) conducted a study to explore the acquisition and articulation of PCK, highlighting the question of whether teacher education programs add to language teachers' knowledge base in Spain. The sample consisted of 9 participants. The instrument used in gathering data was a performance assessment to assess arias of interest, language awareness knowledge of effective teaching and knowledge of learners. Qualitative analysis revealed that differences stages of PCK were between the groups.

Van Dril and others (2002) carried out a study to investigate the development of PCK within a group of 12 pre-service chemistry teachers in Netherland. The instruments of the study were two written questionnaires and interviews. The results of study showed that classroom experience  had the strongest impact on PCK development, and these experiences included activities and events in classroom teaching which also positively affected the knowledge of representations and teaching strategies among the pre-service teachers. In addition, the workshop had an impact on the development of PCK.

Mark (2000) conducted a study to explore teachers' PCK in Mathematics, and to explore the characteristics of teachers' knowledge of students' thinking and misconceptions, and the useful strategies they would use to address students' preconceptions and misconceptions in addition and division of fractions, in Akatsi district in Ghana. The sample of study consisted of 40 teachers. The instruments of the study were written tests on addition and division of fractions and interviews. The students commonest misconceptions were used to construct four in-class problems and administrated to the teachers. The results showed that teachers could identify the students' errors but they could not articulate the students misconceptions clearly. Teachers had difficulty in linking students understanding to their previous constructions. For the case of addressing students misconceptions, teachers couldn't create cognitive conflicts for the students realizing the conceptual or reasoning difficulties and then re-evaluating their thinking processes.

Agee (1998) conducted a study to examine the social and cultural factors influencing English teachers' assessments of their instructional effectiveness of teaching literature and

how these assessments influenced their instructional decisions. The sample of the study consisted of 18 experienced English teachers in New York and Georgia high schools. Data included transcribed interviews, classroom observations, reflection statements written by the teachers, and videotapes of classroom teaching sessions. Findings indicated that teacher participants used similar global strategies for gauging their instructional success. Three levels of assessments were revealed in the data: (1) moment-to-moment, (2) term-to-term, and (3) long-range assessments. Factors such as teachers' own personal histories, goals, and students also influenced how teachers assessed instructional effectiveness. Students' talk was identified as the strongest evidence piece for how these teachers determined the effectiveness of their instruction. The teachers linked student talk to four instructional processes: making immediate and long-term goals for teaching literature, implementing changes in literature teaching approaches, supporting students in learning specific skills, and supporting students in achieving higher levels of intellectual understanding. All of the teachers' approaches to teaching literature were rooted in their personal experiences as readers. Grade level also influenced teachers' perceptions of highly effective instruction. Factors such as race and socio-economic realities of students additionally appeared to influence teachers' goals for teaching literature.

## 2.8 Comments on the Related Studies

Several studies were conducted to examine or explore teachers' PCK, and factors that affect the development of their PCK, or had influenced their perceptions about PCK. For example, Kanat (2014) proved that English teachers had positive perceptions about their PCK. Laban (2016) asserted that years of teaching experience increased teachers' PCK. Also Van Driel (2002) affirmed that too. Ayoubi and others (2012) confirmed that professional development programs increased teachers' PCK. Miqdadi and Al-Omari (2014) confirmed that too. All of these studies' attempts are different in their purposes, variables and methodologies, but they give an empirical reason about the importance of this study which is an attempt to find out the EFL teachers' perceptions about their PCK. This study is special in its dependent and independent variables, its instruments and its methodology.

**Chapter Three**

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**Methods and Procedures**

## 3.1 Introduction

This chapter includes the methods and procedures that the researcher follows to gather data. It gives information about the population, sample and steps of building the instruments of the study which include: questionnaire and interview. It describes also the validity and reliability of these instruments. Finally, it concludes a description of the research procedures and gives information about the research design and statistical analysis used to analyze the data of the study.

## 3.2 Methods

This study employed a mixed  method, which combines both quantative and qualitative research methods, so this method combines detailed descriptions and numerical explanations of collected data to answer the research questions (Akinyemi, 2016). The researcher adopted this method due to its relevance and suitability to the purpose of the study.

## 3.3 Population of the Study

The population of the study consisted of 421 EFL teachers(male/female) of upper elementary schools stage assigned to teach in public and private schools in Bethlehem Directorate in the first semester of the academic year 2017-2018.

## 3.4 Sample of the Study

From this population a fit sample of 200 EFL teachers were selected in stratified sampling to respond to the questionnaire and interview. The sample was distributed according to the

independent variables of: gender, qualification, years of experience, training workshops and supervising authority, as shown in the table (1.3).

**Table (3.1): Sample distribution according to the independent variables:**

| Variables | Level | Number | Percentage |
|---|---|---|---|
| Gender | Female | 143 | 71.5 |
| | Male | 57 | 28.5 |
| Qualification | Diploma | 15 | 7.5 |
| | B.A | 159 | 79.5 |
| | Master | 26 | 13.0 |
| Years of experience | Less than 5 years | 37 | 18.5 |
| | 5 – 10 years | 73 | 36.5 |
| | More than 10 years | 90 | 45.0 |
| Number of workshops | Less than 3 | 19 | 9.5 |
| | 3- 5 | 52 | 26.0 |
| | More than 5 | 129 | 64.5 |
| Type of school | Public | 144 | 72.0 |
| | Private | 56 | 28.0 |

Table (1.3) shows the distribution of the study sample by gender variable, 71.5% for females and 28.5% for males. The variable of qualification shows that 7.5% for diploma, 79.5% for B.A degree and 13% for master's degree. The variable years of experience shows that 18.5% less than 5 years, 36.5% from 5-10 years, and 45% over 10 years. The variable number of workshops shows that 9.5% for less than 3 courses, 26% for 3-5 courses, and 64.5% for more than 5 courses. The variable supervising authority shows that 72% of the public schools and 28% of private schools.

## 3.5 Instruments of the Study

The researcher used the following instruments to achieve the purpose of the study:

1- Questionnaire: A questionnaire was developed to measure teachers' pedagogical content knowledge perceptions. The questionnaire consisted of 3 sections with 47 items extracted from some instruments that were used in the related studies such as Aksu et al (2014) and Tran (2015). The questionnaire contained first a cover page which contains the researcher's letter to the EFL teachers and personal data. Second, a section which includes items about Content Knowledge (CK). Third, a section which includes items about Pedagogical Knowledge (PK). Finally, a section which includes items about Pedagogical Content Knowledge (PCK). The researcher developed the questionnaire in the form of a five point Likert scales ranging from strongly agree to strongly disagree. The questionnaire was submitted to English language experts in the field. Valuable instruction and assistance was offered during the whole process. Questionnaires were distributed to 200 EFL teachers. All questionnaires were filled out and returned to the researcher.

2- Interview: To explore the extent of EFL teachers' understanding of pedagogical content knowledge. Interviews are a common data collection method for qualitative research, as they effectively elicit responses to help answer the research questions.

The interview schedule was semi-structured, with open-ended questions to let the participants express their thoughts and ideas freely, the data collected for this research was voice recorded with face-to-face interviews in a quiet space, and then transcribed for data analysis. The interview was designed to draw out certain aspects of teaching in relation to the PCK framework. The interview questions were derived from the main ideas of the questionnaire.

## 3.6 Validity of the Instruments

To ensure that the content of the questionnaire and the interview were valid, these instruments were handed to a jury of ten professional professors in the field at Al-Quds University, Hebron University and Bethlehem University. The panel of judges were asked to evaluate the appropriateness of the instruments to the whole purpose of the study. They accepted the items and the parts of the questionnaire and the interview, but they asked the researcher to follow some modifications. The researcher took them into account, and the instruments were improved and distributed to the participants.

## 3.7 Reliability of the Instruments

1- Questionnaire: the researcher verified the reliability of the instrument by calculating the reliability of the total degree of reliability coefficient for the domains of the study according to the reliability equation Cronbach alpha. The total score of the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools stage in Bethlehem District was (0.945). This instrument consistently meets the purposes of

study. The following table shows the reliability coefficient for the domains and their total score.

**Table (3.2): Reliability coefficient for the questionnaire domains**

| Domain | Reliability |
|---|---|
| Content knowledge | 0.852 |
| Pedagogical knowledge | 0.817 |
| Pedagogical content knowledge | 0.911 |
| Total score | 0.945 |

2- Interview analysis reliability: The researcher trained a teacher on how to interview a random sample of teachers and to record their answers. The researcher had the same interview and recorded the answers, then she calculated the coefficient of the agreement between the observations recorded by the researcher and the trainee teacher's notes, the percentage of the agreement was (90%). And it's a high indicator of the reliability of the interview instrument.

The researcher recorded the interview using a recording machine and heard it at some other time and recorded the answers, then she compared these answers with previously recorded observations. The agreement coefficient was calculated between the two cases, and the percentage of agreement was (96%) and it's a high indicator of the reliability of the interview instrument.

## 3.8 Procedures of the Study

The study was carried out as the following:

1 - The relevant literature was reviewed to establish the theoretical background of the study.

2- The population was identified and the samples were selected on which the instruments will be applied.

3 - The questions of the study were formulated, depending on the questions in the previous studies.

4- The researcher prepared the study instruments which contained a questionnaire (appendix1), and an interview (appendix 3).

5- The reliability and validity of the instruments were approved.

6- A letter of permission was obtained from Al-Quds University to facilitate the research, as shown in appendix (5).

7- A letter of permission was obtained from the Directorate of Bethlehem for the public and private schools to facilitate the research, as shown in appendix (6).

8- The researcher herself administrated the instruments on EFL teachers in order to obtain more valid and credible results.

9- The two instruments were distributed and gathered in the first semester, during September, 2017.

10- The raw data was gathered and analyzed by using the descriptive and inferential statistics, the results were presented by using simple tables each of which had title and number.

11- The researcher explained the information to reveal whether the results agree or disagree with the previous studies.

12- Recommendations were given for the researchers to carry on more studies.

13- The researcher wrote the references, using (APA) American Physiological Association style.

## 3.9 Variables of the Study

1 - Independent Variables:

a) Gender, which has two levels: ( male\ female).

b ) Qualification, which has three levels: (Diploma, Bachelor's degree, Master's degree)

c ) Teaching experience, which has three levels: (Less than 5, from 5-10, more than 10 years)

d) Workshops attendance, which has three levels (Less than3, from 3-5, More than 5)

e) Supervising authority, which has two levels: (public school, private school).

2- Dependent variables: EFL teachers' perceptions of pedagogical content knowledge.

## 3.10 Data Analysis

In order to analyze the data, the researcher used statistical techniques, Statistical Package for Social Science (SPSS), descriptive statistics (means, frequencies, percentage and Std. Deviation), analytical statistics (Independent T-test, one way ANOVA and Cronbach Alpha).

# Chapter Four

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## Results of the Study

## 4.1 Introduction

This chapter puts forward the statistical analysis of the data collected through the study. The current study aims to explore the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools stage in Bethlehem District. The results listed below have answered the questions and hypotheses of the study. To determine the degree of response means of the study participants, the following levels have been adopted:

**Table (4.1) The degree of response means of the study participants:**

| Level | Mean |
|---------|-------------------|
| Low | Less than 2.33 |
| Average | 2.34 - 3.67 |
| High | 3.68 and higher |

## 4.2 Results of the Questions of the Study

## 4.2.1 Results related to the main question

What is the extent of EFL teachers' perceptions of pedagogical content knowledge in Bethlehem District?

To answer this question, means and standard deviation scores for the study sample responses on the pedagogical content knowledge domains were calculated, as shown in table (4.2).

**Table (4.2): Means and standard deviations for the study sample responses to the pedagogical content knowledge domains**

| No. | Domain | Mean | standard deviations | Degree |
|---|---|---|---|---|
| 1 | Pedagogical knowledge | 3.7641 | 0.43289 | High |
| 2 | Content knowledge | 3.6861 | 0.36379 | High |
| 3 | Pedagogical content knowledge | 3.6843 | 0.46703 | High |
| | Total score | 3.7035 | 0.34744 | High |

It has been noted from the previous table that the means and standard deviations scores of the participants' responses of the extent of teachers' pedagogical content knowledge perceptions in Bethlehem District that the overall mean value is (3.70) and the standard deviation is (0.347) and this shows that the extent of teachers' pedagogical content knowledge perceptions in Bethlehem District came in a very high degree. Pedagogical knowledge domain has got the highest mean score (3.76), then followed by content knowledge domain, then the pedagogical content knowledge domain.

Means and standard deviation scores of the study sample responses to questionnaire items that reflect the content knowledge domain were calculated.

**Table (4.3): Mean and standard deviation scores for the study sample responses to content knowledge domain**

| No | Item | Mean | standard deviations | Degree |
|----|------|------|---------------------|--------|
| 11 | I can explain clearly the content of the subject | 3.96 | 0.816 | High |
| 1 | I know the content of what I am teaching | 3.89 | 0.703 | High |
| 2 | I know the critical points of my lessons. | 3.87 | 0.816 | High |
| 12 | My questions evaluate students' understanding of a topic. | 3.85 | 0.901 | High |
| 4 | I know the basic definitions in my lesson. | 3.74 | 0.725 | High |
| 10 | I gain deeper understanding about the content of my teaching subject. | 3.74 | 0.810 | High |
| 6 | I can recognize lacking areas related to my lessons. | 3.73 | 0.792 | High |
| 8 | I can develop class activities and projects. | 3.71 | 0.848 | High |
| 14 | My students clearly understand the objectives of this course. | 3.67 | 0.772 | Average |
| 5 | I pursue the last improvement regarding teaching lessons. | 3.61 | 0.807 | Average |
| 9 | I keep–up – to date with resources (books, journals, etc) in my content area. | 3.52 | 0.736 | Average |
| 3 | I know how theories and principles of the subject have been developed. | 3.50 | 0.709 | Average |
| 7 | I attend conferences and activities in my content area.. | 3.45 | 0.813 | Average |
| 13 | I know students' learning difficulties of the subject before class. | 3.37 | 0.870 | Average |
| | **Total score** | **3.6861** | 0.36379 | High |

Data shown from the table (4.3) reveals that the overall mean value of the CK domain has (3.68) and std. deviation has (0.363), which indicates that the content knowledge domain is very high.

The results in Table (4.3) also indicate that (8) items came to high degree and (6) items came to an average degree.

The item "I can explain clearly the content of the subject" has the highest mean score (3.96). Then the item " I know the content which I am teaching" has the mean score (3.89). The item "I know students' learning difficulties of subject before class" has got the lowest mean score (3.37). Followed by the item" I follow conferences and activities in my content area" which got (3.45).

Means and standard deviations scores of the study sample responses to questionnaire items that reflect the pedagogical knowledge domain were calculated.

**Table (4.4) Means and standard deviation scores for the study sample responses to pedagogical knowledge domain.**

| No. | Item | Mean | Std. deviation | Degree |
|-----|------|------|----------------|--------|
| 8 | I provide oral instructions that are clear and appropriate. | 4.10 | 0.970 | High |
| 10 | I create opportunities for students to practice their written English. | 4.04 | 0.987 | High |
| 9 | I create opportunities for students to practice their oral English. | 4.00 | 0.938 | High |
| 5 | I use realia (real-life)objects as an instructional aids. | 3.87 | 0.847 | High |
| 6 | I establish opportunities for students to interact | 3.81 | 0.955 | High |
| 7 | I establish opportunities for students to speak to reinforce learning | 3.81 | 0.933 | High |
| 4 | I select problems suitable for teaching contexts in my lesson | 3.69 | 0.847 | High |
| 1 | I realize the difficulties of students during my lesson | 3.64 | 0.857 | Average |
| 11 | I provide various formats of assessments according to student's intelligence | 3.61 | 0.884 | Average |
| 3 | I determine the misconceptions of students while teaching new topics | 3.52 | 0.716 | Average |
| 2 | I prepare an appropriate lesson plan in accordance with the point that students may be pressured in my lessons | 3.33 | 0.717 | Average |
| | Total score | 3.7641 | 0.43289 | High |

Data shown from the table (4.4) reveals that the overall mean value for the PK domain has got (3.76) and std. deviation is (0.432) and indicates that the pedagogical knowledge domain came in a very high degree.

The results in Table (4.4) indicate that (7) items were high degree and (4) items were average degree.

The item "I provide oral directions that are clear and appropriate" has the highest mean score (4.10) . Followed by the item "I create opportunities for students to practice their written English" which got the mean score (4.04). The item "I prepare an appropriate lesson plan in accordance with the point that students may be pressured in my lessons" has the lowest mean score (3.33). Followed by the item "I determine the misconceptions of students while teaching new topics" which has the mean score (3.52).

Means and standard deviation scores of the study sample responses to questionnaire items that reflect the pedagogical content knowledge were calculated.

**Table (4.5) Means and standard deviation scores for the study sample responses to pedagogical content knowledge domain.**

| No. | Item | Mean | Std. Deviation | Degree |
|---|---|---|---|---|
| 14 | I use my voice in the classroom effectively. | 3.84 | 1.000 | High |
| 9 | I begin different activities which motivate students for lessons. | 3.80 | 0.953 | High |
| 20 | I use questioning technique during lesson | 3.80 | 0.962 | High |
| 10 | I use awards, punishments and reinforces effectively | 3.76 | 0.905 | High |
| 22 | I prepare lesson plans covering the important points of topics | 3.76 | 0.978 | High |
| 17 | I control my emotions during lessons | 3.75 | 0.940 | High |
| 2 | I use effective teaching methods and techniques to use for the topic | 3.73 | 0.913 | High |
| 11 | I construct a democratic environment that enables the self-expression of students | 3.73 | 0.902 | High |
| 1 | I understand concepts that exemplify with daily life for students in the lesson | 3.71 | 0.911 | High |
| 6 | I organize a suitable learning environment for students | 3.71 | 0.877 | High |
| 3 | I select the appropriate teaching method for standards | 3.70 | 0.890 | High |
| 15 | I support subjects in my content area with outside (out-of-school) activities | 3.69 | 0.882 | High |
| 16 | I present systematically in contexts of lessons (from concrete to abstract or from easy to hard | 3.68 | 0.884 | High |
| 5 | I know how to assess students' performance in the classroom | 3.66 | 0.920 | Average |
| 19 | I make connections among related subjects in my content area | 3.66 | 0.905 | Average |
| 7 | I control negative situations while teaching | 3.65 | 0.939 | Average |
| 8 | I connect with students outside of the classroom | 3.63 | 1.023 | Average |
| 13 | I use suitable learning and teaching instruments | 3.63 | 0.905 | Average |
| 18 | I have knowledge about learning theories | 3.57 | 0.883 | Average |
| 12 | I use time effectively in the lesson | 3.56 | 0.985 | Average |
| 4 | I take precautions determining the individual differences of student | 3.55 | 0.855 | Average |
| 21 | I teach concepts using multi representation such as tables, diagrams, graphic and equation etc | 3.51 | 0.908 | Average |
|  | Total score | **3.6843** | 0.46703 | High |

Data shown from the table (4.5) reveals the overall mean value for the PCK domain has (3.68) and std. deviation has (0.467) and indicates that the pedagogical content knowledge domain came in a very high degree.

The results in Table (4.5) indicate that (12) items were high degree and (9) were average degree.

The item "I use my voice in the classroom effectively" has the highest mean score (3.84). Followed by the item "I begin different activities which motivate students for lessons" and the item " I use questioning technique during lesson" which got (3.80).

The item "I teach concepts using multi representation such as tables, diagrams, graphic and equation etc "has the lowest mean score (3.51). Followed by the item "I take precautions determining the individual differences of students" which got (3.55).

## 4.2.2 Results related to the sub- question:

What is the extent of EFL Teachers' perceptions of Pedagogical content knowledge in Bethlehem District ? And are those pedagogical content knowledge perceptions different due to (gender, qualification, years of experience, number of training workshops and supervising authority)?

To answer this question it was turned into the following null hypotheses:

## 4.2.2.1 Results of the first hypothesis:

There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to gender .

To test this hypothesis, the researcher used independent T .test as table (4.6) shows:

**Table (4.6): The results of independent t- test for the perceptions of EFL teachers due to gender**.

| Domain | Gender | No. | Mean | Std. deviation | T | Sig |
|---|---|---|---|---|---|---|
| Content Knowledge | Female | 143 | 3.5551 | 0.36171 | 3.292 | 0.001 |
| | Male | 57 | 3.7383 | 0.35248 | | |
| Pedagogical knowledge | Female | 143 | 3.7031 | 0.42817 | 3.229 | 0.001 |
| | Male | 57 | 3.9171 | 0.40955 | | |
| Pedagogical Content Knowledge | Female | 143 | 3.6977 | 0.46988 | 0.641 | 0.522 |
| | Male | 57 | 3.6507 | 0.46220 | | |
| Total score | Female | 143 | 3.7111 | 0.36434 | 0.485 | 0.628 |
| | Male | 57 | 3.6846 | 0.30309 | | |

The above table shows that the value of "T" for the total score is (0.485), and the level of significance is (0.628). This means, there are no statistical significant differences in the EFL teachers' pedagogical content knowledge  perceptions due to gender, but there are statistical significant differences in the content knowledge and pedagogical knowledge domains, and they are in favor of males. Thus, the first hypothesis was accepted.

## 4.2.2.2 Results of the second hypothesis:

There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to qualification.

The second hypothesis was examined by calculating the means and deviation scores for the perceptions of EFL teachers due to qualification.

**Table (4.7): Mean and standard deviation scores for the perceptions of EFL teachers due to qualification**.

| Domain | Qualification | No. | Mean | Std. Deviations |
|---|---|---|---|---|
| Content Knowledge | Diploma | 15 | 3.6524 | 0.25876 |
| | B.A | 159 | 3.6806 | 0.36948 |
| | Master degree | 26 | 3.7390 | 0.38648 |
| Pedagogical Knowledge | Diploma | 15 | 3.7636 | 0.40627 |
| | B.A | 159 | 3.7564 | 0.43265 |
| | Master degree | 26 | 3.8112 | 0.46206 |
| Pedagogical Content Knowledge | Diploma | 15 | 3.5424 | 0.30466 |
| | B.A | 159 | 3.6664 | 0.46054 |
| | Master degree | 26 | 3.8759 | 0.53990 |
| Total Score | Diploma | 15 | 3.6270 | 0.21259 |
| | B.A | 159 | 3.6917 | 0.34507 |
| | Master degree | 26 | 3.8200 | 0.40563 |

Table (4.7) shows that there are apparent differences in the extent of EFL teachers' pedagogical content knowledge  perceptions  in the  upper elementary schools stage due to qualification. To find out the significance of the differences, one way ANOVA was used as shown in Table (4.8).

**Table (4.8): Results of one way ANOVA test for the perceptions of EFL teachers due to qualification.**

| Domain | Variance Source | Sum of squares | Df | Mean squares | F | Sig |
|---|---|---|---|---|---|---|
| Content knowledge | Between groups | 0.095 | 2 | 0.047 | 0.355 | 0.701 |
| | Within groups | 26.241 | 197 | 0.133 | | |
| | Total | 26.336 | 199 | | | |
| Pedagogical Knowledge | Between groups | 0.067 | 2 | 0.034 | 0.177 | 0.838 |
| | Within groups | 37.224 | 197 | 0.189 | | |
| | Total | 37.291 | 199 | | | |
| Pedagogical Content Knowledge | Between groups | 1.307 | 2 | 0.654 | 3.059 | 0.051 |
| | Within groups | 42.099 | 197 | 0.214 | | |
| | Total | 43.406 | 199 | | | |
| Total degree | Between groups | 0.463 | 2 | 0.231 | 1.935 | 0.147 |
| | Within groups | 23.560 | 197 | 0.120 | | |
| | Total | 24.023 | 199 | | | |

From the table above, it can be noticed that F value for the total degree is (1.935), and the significant level is (0.147), and this is higher than ($0.05 \geq \alpha$). So, there are no statistical significant differences in the perceptions of EFL teachers due to qualification, and so for the domains. Thus, the hypothesis has been accepted.

## 4.2.2.3 Results of the third hypothesis:

There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to years of experience. The third hypothesis was examined by calculating the mean and deviations scores for the perceptions of EFL teachers due to experience.

**Table (4.9): Mean and standards deviations scores for the perceptions of EFL teachers due to years of experience.**

| Domain | Years of experience | No. | Mean | Std Deviation |
|---|---|---|---|---|
| Content knowledge | Less than 5years | 37 | 3.6042 | 0.34363 |
| | From 5-10 years | 73 | 3.6311 | 0.35275 |
| | More than 10 years | 90 | 3.7643 | 0.36882 |
| Pedagogical knowledge | Less than 5years | 37 | 3.6437 | 0.43513 |
| | From 5-10 years | 73 | 3.7298 | 0.37726 |
| | More than 10 years | 90 | 3.8414 | 0.46286 |
| Pedagogical content knowledge | Less than 5years | 37 | 3.6904 | 0.45008 |
| | From 5-10 years | 73 | 3.5890 | 0.42420 |
| | More than 10 years | 90 | 3.7591 | 0.49706 |
| Total | Less than 5years | 37 | 3.6538 | 0.34945 |
| | From 5-10 years | 73 | 3.6345 | 0.30797 |
| | More than 10 years | 90 | 3.7799 | 0.36464 |

It can be noticed that there are apparent differences in the perceptions of EFL teachers due to years of experience. To check these differences, one way ANOVA was applied using test data as shown in the table (4.10).

**Table (4.10): One way ANOVA results for the responses of EFL teachers due to years of experience**

| Domain | Variance source | Sum of squares | Df | Mean square | F | Sig |
|---|---|---|---|---|---|---|
| Content knowledge | Between groups | 1.019 | 2 | 0.509 | 3.964 | 0.021 |
| | Within groups | 25.317 | 197 | 0.129 | | |
| | Total | 26.336 | 199 | | | |
| Pedagogical knowledge | Between groups | 1.160 | 2 | 0.580 | 3.163 | 0.044 |
| | Within groups | 36.131 | 197 | 0.183 | | |
| | Total | 37.291 | 199 | | | |
| Pedagogical content knowledge | Between groups | 1.167 | 2 | 0.584 | 2.722 | 0.68 |
| | Within groups | 42.239 | 197 | 0.214 | | |
| | Total | 43.406 | 199 | | | |
| Total degree | Between groups | 0.964 | 2 | 0.482 | 4.119 | 0.018 |
| | Within groups | 23.059 | 197 | 0.117 | | |
| | Total | 24.023 | 199 | | | |

From the table above, it can be noticed that F value for the total degree is (4.119), and the significant level is (0.018), and it is less than the significant level ($0.05 \geq \alpha$). Thus, there are significant differences in the perceptions of the EFL teachers due to experience, and so, for the domains except the pedagogical content knowledge domain, and then the third hypothesis was rejected. The results of the (LSD) test were examined to show the direction of the differences as follows:

**Table (4.11): LSD post-hoc test for years of experience**

| Domain | Variables | | Differences in means | Sig |
|---|---|---|---|---|
| Content knowledge | Less than 5 years | From 5-10 | -0.02687 | 0.711 |
| | | More than 10 years | -0.16004* | 0.023 |
| | From 5-10 years | Less than 5 years | 0.02687 | 0.711 |
| | | More than 10 years | -0.13317* | 0.019 |
| | More than 10 years | Less than 5years | 0.16004* | 0.023 |
| | | From 5-10 years | 0.13317* | 0.019 |
| Pedagogical knowledge | Less than 5 years | From 5-10 years | -0.08603 | 0.321 |
| | | More than 10years | -0.19768* | 0.019 |
| | From 5-10 years | Less than 5years | 0.08603 | 0.321 |
| | | More than 10years | -0.11165 | 0.099 |
| | More than 10 years | Less than 5years | 0.19768* | 0.019 |
| | | From 5-10years | 0.11165 | 0.099 |
| Total | Less than 5years | From 5-10 years | 0.01932 | 0.780 |
| | | More than 10 years | -0.12608 | 0.061 |
| | From 5-10 years | Less than 5years | -0.01932 | 0.780 |
| | | More than 10years | -0.14540* | 0.008 |
| | More than 10 years | Less than 5years | 0.12608 | 0.061 |
| | | From 5-10 years | 0.14540 | 0.008 |

Table (4.11) reveals that in CK domain there are significant differences between the mean value between those who have less than five years' experience and those who have more than ten years' experience in favor of more than ten years' experience.

In PK domain, there are significant differences between the mean value of those who have less than five  years' experience and those who have more than ten  years' experience in favor of more than ten  years' experience.

It is noted also, that there are significant differences between the mean value of those who have experience from five to ten  years and those who had more than ten  years' experience in favor of more than ten  years' experience.

 Therefore, there are significant differences in the perceptions of the EFL teachers due to years of experience in favor of more than ten years' of experience.

## 4.2.2.4 Results of the fourth hypotheses:

There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to the number of training workshops.

The fourth hypothesis was examined by calculating the mean and deviation scores of the perceptions of the EFL teachers due to the number of  training workshops.

**Table (4.12): Mean and standard deviations score for the perceptions of EFL teachers due to the number of  training workshops.**

| Domain | No. of workshops | No. | Mean | Std Deviations |
|---|---|---|---|---|
| Content knowledge | Less than 3 | 19 | 3.6880 | 0.39066 |
| | From 3-5 | 52 | 3.5934 | 0.39946 |
| | More than 5 | 129 | 3.7231 | 0.34034 |
| Pedagogical knowledge | Less than 3 | 19 | 3.6603 | 0.35835 |
| | From 3-5 | 52 | 3.7762 | 0.46996 |
| | More than 5 | 129 | 3.7745 | 0.42838 |
| Pedagogical content knowledge | Less than 3 | 19 | 3.6986 | 0.53573 |
| | From 3-5 | 52 | 3.6058 | 0.50798 |
| | More than 5 | 129 | 3.7139 | 0.43877 |
| Total | Less than 3 | 19 | 3.6865 | 0.39051 |
| | From 3-5 | 52 | 3.6420 | 0.38408 |
| | More than 5 | 129 | 3.7308 | 0.32422 |

From the above table, it can be noticed that there are apparent differences in the perceptions of the EFL teachers due to the number of training workshops. To check these differences, one way ANOVA was applied as shown in the table (4.13).

**Table (4.13): One way ANOVA results for the responses of  EFL teachers due the number of training workshops.**

| Domain | Variance source | Sum of squares | Df | Mean squire | F | Sig |
|---|---|---|---|---|---|---|
| Content knowledge | Between groups | 0.624 | 2 | 0.312 | 2.390 | 0.094 |
| | Within groups | 25.712 | 197 | 0.131 | | |
| | Total | 26.336 | 199 | | | |
| Pedagogical knowledge | Between groups | 0.226 | 2 | 0.113 | 0.601 | 0.549 |
| | Within groups | 37.065 | 197 | 0.188 | | |
| | Total | 37.291 | 199 | | | |
| Pedagogical Content Knowledge | Between groups | 0.437 | 2 | 0.219 | 1.003 | 0.369 |
| | Within groups | 42.968 | 197 | 0.218 | | |
| | Total | 43.406 | 199 | | | |
| Total | Between groups | 0.299 | 2 | 0.149 | 1.240 | 0.292 |
| | Within groups | 23.724 | 197 | 0.120 | | |
| | Total | 24.023 | 199 | | | |

From the table above, it can be noticed that F value for the total degree is (1.240), and the significant level is (0.292), and this is more than (0.05≥ α). So, there are no statistical significant differences in the EFL teachers' pedagogical content knowledge  perceptions due to the number of training workshops, and so for the domains. Thus the fourth hypothesis was accepted.

## 4.2.2.5 Results of the fifth hypothesis;

There are no statistical significant differences at the level (α≤0.05) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to the supervising authority.

The fifth hypothesis was examined by calculating the results of the T test and  mean scores for the perceptions of EFL teachers due to the supervising authority.

**Table (4.14): The results of independent t- test for the perceptions of EFL teachers due to the supervising authority**

| Domain | Supervising authority | No. | Mean | Std deviation | T | Sig |
|---|---|---|---|---|---|---|
| Content knowledge | Public | 144 | 3.5928 | 0.29518 | 6.369 | 0.000 |
| | Private | 56 | 3.9260 | 0.41336 | | |
| Pedagogical knowledge | Public | 144 | 3.7191 | 0.40683 | 2.386 | 0.018 |
| | Private | 56 | 3.8799 | 0.47826 | | |
| Pedagogical content knowledge | Public | 144 | 3.6199 | 0.40491 | 3.197 | 0.002 |
| | Private | 56 | 3.8498 | 0.56937 | | |
| Total degree | Public | 144 | 3.6350 | 0.27264 | 4.699 | 0.000 |
| | Private | 56 | 3.8796 | 0.44686 | | |

The above table shows that the value of "T" for the total score is (4.699) and the level of significance is (0.000). This means, there are statistical significance differences in the extent of EFL teachers'  pedagogical content knowledge  perceptions  in the  upper elementary schools stage due to the supervising authority, and so for the domains, The differences are in favor of private schools. Thus, the fifth hypothesis was rejected.

## 4.3 Results related to the Interview

The researcher have prepared interviews to explore the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools stage in Bethlehem District, and they were 6 participants. The results of these interviews were summarized as the following:

**Question No. 1: Would you describe the process you go through when you plan and teach a specific topic? (content knowledge).**

**Teacher 1**.: For me, I follow the instructions in the teachers' book for lesson plans, because my supervisor asked me to do that and she rejected my way in planning and teaching the lesson, so I always follow teachers' book guide. First, I'll write the aims on the board, then I'll tell the students about them, after that, I'll give my students ideas about the new topic, then explain it to them. Next, I will ask them some questions about it, then describe it in more details. I will sum up the topic for students by asking some important questions and finally I'll give them a homework to do it at home.

**Teacher 2**.: I prepare the lesson on a notebook, I write the aims of the lesson on the board, at least 2 or 3 aims we should not write more than that. Next, I revise with students the previous lesson through oral questions (we focus here on the weak students). After that I introduce the new words in the box, and go through the lesson, describe the pictures, draw, discuss.. etc.

**Teacher 3:** I do this process through these steps: first, I do pre-planning the new topic, then I introduce the new topic for the student. After that I ask them to read examples, then ask them questions to help them get the idea of the new topic. Finally, I ask them to do specific tasks and activities.

**Teacher 4**: I always plan for the new topic on the notebook, put the objectives, procedures and ways that I will use them in assessing students, because pre-planning lesson is important and has positive effects on teacher and teaching process, teacher will know what to do during the lesson and will not face problems and difficulties while he or she explains the topic. Then I will revise with them the previous lesson. Then I will ask the students some questions about the new lesson, I will use some activities and games to make the learning process easier for students. While choosing the activities, they should be appropriate for students' age, needs and interests, for example, group work activities, writing, playing, and acting will attract the students and motivate them. In addition, I like to prepare activities that consider the multiple intelligences like dividing the class into groups, to write for example a poem or a story or draw pictures.

**Teacher 5:** First, I read about the new topic carefully, then I define the objectives of the topic. Next I decide the strategy that I would follow while explaining the topic, I also decide the needed materials, activities and the suitable assessment techniques.

**Teacher 6:** When I plan my lesson, I take in consideration students' needs and interests. I prepare activities which address practice of the four skills of English language like pair work activities and matching activities, and it's important to bring extra activities and not just follow the teachers' book. Then I write some notes on a notebook like objectives, materials, procedures and assessment ways that I will need them while explaining the topic for students.

I will revise with them the previous lesson, then presenting the new concepts, and if the new lesson has new vocabulary, I will prepare flashcards writing on them the new words, then I will put them on the board in a mixed way and ask students to re- arrange them correctly. I will show them videos, pictures, charts to motivate and engage them in the lesson. I will give them tasks about the lesson, then I will revise with them the most important ideas and give them a worksheet or a homework.

It is clear from the answers that teachers gave that they asserted the importance of planning the lessons. In addition, some of teachers' lesson plans lacked using extra activities that fit the students' needs and interests, whereas the rest of lesson plans were enriched with various of activities, strategies and materials that suit all the students' levels, needs, interests and multiple intelligences. Teachers also indicated the necessity of revising the students in the previous lesson and prepare activities integrating the four skills of English language.

**Question No.2: a) Do students misunderstand specific concepts of your lesson? and How do you usually discover these misconceptions?**

**Teacher 1:** Yes, certainly they do, I discover these misconceptions through asking them questions.

**Teacher 2:** Yes, they misunderstand specific concepts, through giving exams or asking them questions.

**Teacher 3:** Yes, sometimes students misunderstand specific concepts, and it will be clear that students have misconceptions while doing the tasks and activities of the lesson.

**Teacher 4:** Yes, they misunderstand some concepts, and I discover these misconceptions through tests or activities they do in the class during the lesson.

**Teacher 5:** Sometimes students misunderstand some concepts of the lesson and I discover these misconceptions while the final assessment or the formative assessments.

**Teacher 6:** Yes, they misunderstand some concepts, I discover them through activities, tasks, tests.

**B) What are some examples of how approach teaching strategies used in teaching challenging concepts?**

**Teacher 1:** For example, some students have misconceptions in regular and irregular verbs, they think that all verbs we can add (ed) at the end of the verbs and that is wrong, some verbs are irregular and not ended with(ed), so I asked a student who has a beautiful handwriting to write all these verbs and stick on the walls. And I ask them to memorize these verbs and then I give them tests in these verbs.

**Teacher 2:** I use flash cards, or act out conversations.

**Teacher 3:** Sometimes students misunderstand some concepts in grammar like present simple or present continuous , so I use technology in designing lessons on the smart board that attract the students. In addition, I always give them examples about these concepts.

**Teacher 4:** I try to explain the concept in different ways to make it clear for them, like playing games or using computer in designing the lessons. In addition, I make classroom discussion to gauge their understanding the concept.

**Teacher 5:** I may show the students items they can see and touch that represent the concepts. I could design a game that relates the concepts with their pictures, classes and meanings.

**Teacher 6:** I use flash cards, tests, I try to explain the concept in different ways by using technology, role playing or competition.

**c) Would you describe some ways that help students develop their own ideas as they moved towards understanding/mastering concepts?**

**Teacher 1:** I ask a student for example who is talented in drawing to draw some new vocabularies or to do wallpapers.

**Teacher 2:** I use many things like repeating words, memorizing concepts, performing and drawing pictures, these activities will motivate them while mastering the concepts.

**Teacher 3:** I use many ways like: working in groups to discuss the new concepts. Then ask students to clarify the ideas for their partners in addition to organizing and practicing doing projects about the new concepts and finally, let the students talk and express their own ideas about the new concepts.

**Teacher 4:** I can ask them to learn a subject and tell them that I will give them extra marks and rewards, also, let them read external material or novels, or let them watch videos about these new concepts.

**Teacher 5:** I divide the students into groups of 5-6 students, and name one of them the leader of the group in a reading periods. First, I ask each head student to guide his groups' discussion using questions generating, summarizing, clarifying and predicting. Then students can take the role of the teacher in monitoring a dialogue.

**Teacher 6:** By letting them do research on the concepts, make projects and take the role of the teacher, or give them tasks to do in groups.

All the teachers asserted that their students have misconceptions in specific topics, and they discover them through many ways like exams, doing tasks and activities, or asking them questions about the concept. Furthermore, they use various strategies in dealing with the challenging concepts such as: tests, memorization, discussion, and group work.

**Question No. 3) In your class, in what ways do students investigate their own interests and in what ways do these interests align with individual differences?**

**Teacher 1:** By expressing themselves, and I designed a " suggestion box ", it is a cardboard box, I invite students to write any information about their interests, or just tell me about difficulties they face.

**Teacher 2:** By reading things that belong to their interests, discussing with friends or teacher some issues relating to their interests.

**Teacher 3:** To help students discover their interests, teachers should vary their own techniques of teaching. By doing so, he\she will help students discover their own interests. I also give them suggested topics to write about, and there always have the option of writing on their own topic they choose.

**Teacher 4:** Preparing various activities that suit all the levels in the class, designing questions carefully for good students and weak students in addition to asking them what they like to do, or let them suggest activities they like to do.

**Teacher 5:** I may give the students the chance to make a game or a representation about a particular title in the lesson and let each choose the title he is interested in and then sort the students according to the titles they have chosen.

**Teacher 6:** let them design activities they want, let them participate with me in putting the objectives, but I really talk to them to know their interests and what they like to do.

In the light of the above, teachers use many ways through which their students can investigate their interests such as: discussion, talking to them, preparing and choosing activities,  using suggestion box or writing about topics suggested by the teacher.

**Question No. 4) Would you mention some collaborative and individual strategies you use to support your students learning, and describe them?**

**Teacher1:** Through dividing the class into small groups and give them some tasks.

**Teacher 2:** By dividing the class into groups, I mix the good and weak students because weak students will benefit from the good students or I use pair work activities. In my opinion, the strategies that we usually use are the traditional ones like group work or pair work, I find some difficulties in applying new strategies, because students have low achievement and don't  participate in these strategies and activities, the most of the class have problems in English discipline. In addition, the classrooms are crowded with the large number of students, so I try not to waste the time allocated  for the lesson. For the group work, I divide the students into five students then give them tasks to do.

**Teacher 3:** I use group work, doing projects, discussion.

Group work is well- known strategy, I divide students into groups, then prepare them activities and tasks to do. For the project, I ask students to do them individually or in groups, by choosing a topic and make research on it and make representation.

**Teacher 4:** I ask them to work in groups and doing projects. I ask each group to collect some information about the topic and each one has a role to do in the group. For example, one of them brings pictures, another one writes sentences, then another student reads a paragraph. For the projects I ask students to bring or choose a subject which is related to the topic and do a research on it.

**Teacher 5:** I divide students into small groups and give each student a task to do within the group. Role-playing in acting a dialogue or text is another collaborative strategy. On

the other hand, individual learning could be achieved through using cards for learning vocabulary, reading, songs, dictation, preparing power point about a particular subject.

**Teacher 6:** I use peer tutoring strategy with my students which is one of the teaching methods, which students are taught by their classmates. It has been found that it contributes effectively to the development of student skills in the most of academic aspects, especially if the student who is teaching is directed to how to deal with the learner. Also I use cooperative learning which is a method of sharing the students in a debate sitting in a circular and each student presents his ideas and his point of view for everyone so that everyone benefits from each other in thinking and accessing to solutions.

Teachers mentioned and described some strategies they use in their classrooms, such as: group work, doing projects, discussion, peer tutoring and cooperative learning. Moreover, there are such difficulties which face teachers during applying new strategies like overcrowded classrooms and the lack of motivation in participating in activities.

**Question No.5: a) What are the ways in which students establish objectives, monitor their learning and apply the skills they have learned?**

**Teacher 1:** I give them daily exams, and ask them to make conversations, or write paragraphs or real life situations.

**Teacher 2:** After giving any activity such as writing, I monitor them when I give the students a homework about writing an essay for example, and check their work carefully give them feedback about their work.

**Teacher 3:** I ask the students to take the role of the teacher to explain the new topics, and I ask them also to write reports, in addition, I give them quizzes and exams.

**Teacher 4:** Students can use what they learnt in the real life situations like giving directions to some tourists when they come to our country or ordering food from restaurant using English language. Moreover, giving them tests and worksheets, or I ask them to write a topic as a final assessment.

**Teacher 5:**Taking careful notes and the review before tests, so they have the chance to ask the teachers about what they don`t understand. Doing the homework in time by themselves and asking the teachers about unknown drills and correcting the wrong ones at once.

Sharing the information in the class. Working within groups or in pairs helps the students to exchange ideas.

**Teacher 6:** By making speaking activities, or making interviews, or writing texts, in addition to the traditional way of assessment, in other words tests and quizzes.

**b) Do you try to diversify questions while designing your exam? And, what do you know about authentic evaluation?**

**Teacher 1:** Yes, of course. I write questions that suit all levels of students, there are  easy questions for weak students, and difficult questions for the clever students, which encourage them to think and answer these questions. I think authentic evaluation needs time to apply  in the classes, and for our students, it doesn't work, so I think that the common ways of assessment are better than the authentic evaluation.

**Teacher 2:** Yes, I diversify the questions for the students, and I try to cover all the four skills. I use pre-task questions, during- tasks and post-tasks to evaluate the students.

**Teacher 3:** It is vital to diversify the questions while designing the exam, and authentic evaluation is related to the material that had been taught.

**Teacher 4:** I try to diversify the questions while designing the exam, and design easy questions and difficult ones that suit all levels of the students. For example, I can ask students to make presentations or making a dialogue to assess the speaking skill.

**Teacher 5:** Yes, I diversify questions. I use indirect questions (Wh- questions) - multiple choice – questions in which the students may give an opinion or a suggestion. For the authentic evaluation, it means to give the students the opportunity to engage in real questions or tasks in which they use knowledge and skills, like doing researches and presentations.

**Teacher 6:** Yes, certainly I diversify the questions of the exam, using all the levels in Blooms' taxonomy. In addition, I use all kinds of questions like closed questions, open-ended questions or matching. Authentic evaluation is a form of assessment in which students are asked to perform real-world tasks like observations and representations.

Teachers mentioned many ways they use in assessing learners like daily exams, making speaking activities like making interviews, conversations and real life situations, observations, presentations and discussion. All of them asserted that they diversify the questions of the exam. Some of them pointed out that exams' questions should be appropriate to the students' levels, and take in consideration the Bloom' taxonomy while designing the exams, and they stated some kinds of these questions like WH- questions, multiple choice questions and other kinds, but most of them didn't give clear definition for the authentic evaluation.

# Chapter Five

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## Discussion, Conclusion and Recommendations

### 5.1 Introduction

This chapter deals with the interpretation of the statistically analyzed data of the questions and hypotheses of the study, presented in chapter four, and it seeks to interpret the findings in light of the reviewed literature. It also includes some suggestions and recommendations which are expected to be beneficial in the future.

## 5.2 Discussion of the Results of the main Question:

What is the extent of EFL teachers' perceptions of pedagogical content knowledge in Bethlehem district?

The results showed that the overall mean score was (3.70) and the SD was (0.37), and this shows that the extent of teachers' pedagogical content knowledge perceptions in Bethlehem District came up with a high score.

The reason for this finding can be justified in that the teachers considered themselves knowledgeable in most of the components of PCK. Their long duration in teaching had created a delusion about their knowledge in PCK principles. The content of teachers' conceptions about PCK appears to be rather traditional particularly in terms of students' need and interests, selecting appropriate instructional strategy to overcome students' misconceptions and authentic evaluation. EFL teachers need to reconstruct their PCK. Therefore, they need to attend teacher training programs that provide opportunities to develop and use PCK in teaching situations as well as to improve their abilities to recognize conceptual difficulties and use strategies promoting conceptual change during classroom practice.

The current study results agreed with the results of Kanats' (2014) study which showed that the English teachers had positive perceptions about their PCK, and disagreed with Miqdadi's and Al-Omari's (2014) study which showed that the Science and Mathematical teachers' perceptions were weak.

## 5.3 Discussion of the Results of the First Hypothesis ;

There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to gender**.**

The results supported the null hypothesis, and there were no significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to gender.

The researcher thinks that the reason for this result maybe is that the teachers, regardless to their gender, receive the same academic knowledge, and the same in-service training and hence, they acquire similar professional competencies and skills. Therefore, their perceptions seem to be similar according to their PCK.

The results agreed with the results of Kanat's (2014) study, Al-Atrash's study (2016) and Miqdadi's and AL-Omari's study (2013).

## 5.4 Discussion of the Results of the Second Hypothesis:

There are no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to qualification.

The results revealed that there were no statistical significant differences at the level ($\alpha \leq 0.05$) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to qualification.

In light of the above, the researcher indicates that regardless the qualification, whether the teachers have diploma, or B.A, or even a master degree, they were exposed to the same courses at universities, and they were taught by professional instructors. In addition, they received the same training workshops held by the Palestinian Ministry of Education.

The results of this hypothesis are in consistence with the results of Al-Trash (2016) and the result wasn't in consistence with Setiadi and Musthafa (2013) who found that the PCK was attained by teachers with higher degree of education or academic qualification, so Master degree holders had higher mean scores of PCK than the teachers with B.A degree. Migdadi and Al-Omari's (2014) study results revealed significant differences in teachers' perceptions due to the scientific qualification. Also, having disagreed with Liu's (2011) study and Al-Jaro's et al (2017) study, the analysis of university courses revealed that pedagogical skills courses are not enough to enhance and strengthen the student teachers' PCK needed to be reflected in their teaching practices. The findings showed that the curriculum lacks courses necessary to provide student teachers with basic knowledge and pedagogical principles which are of vital significance to demonstrate their understanding before they are practically engaged in the teaching experience.

## 5.5 Discussion of the Results of the Third Hypothesis:

There are no statistical significant differences at the level (α≤0.05) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to experience.

Results showed that there were differences at the level (α≤0.05) in the mean scores of EFL teachers' pedagogical content knowledge perceptions due to experience, and these differences were in favor of years of experience for more than 10 years.

The researcher asserts  that the teachers do continue to improve their effectiveness as they gain experience in the teaching profession, expert teachers understand their subject matter, understand students they are teaching, use good questioning techniques, and they make careful plans. These plans consist of identifications of English concepts or skills being presented in several ways of representations .Also, they use multiple examples, connections among these concepts and skills, they integrate their knowledge of curriculum, teaching strategies, and classroom setting. In addition, they are able to adapt their plans to accommodate the needs and interests of the students in the class. They are more efficient in lesson planning, they spend much less time planning, and yet their planning is often much effective. Because they have in store well- established routines, they can recall their experiences in teaching similar lessons.

The findings agreed with Ibrahim's (2016), Pitmann's (2015), Van Driel's (2002), Agee's (1998) Laban's (2016),  who all agreed that classroom experience  had the strongest impact on PCK development.

The findings disagreed with Al-Trash's (2916), Yang's (2011), Kanat's (2014) Miqdadi's and Al-Omari's (2014) who all  said that the teaching experience doesn't affect the PCK of teachers. In addition, the results also disagreed  with Asl's et al (2014) study, the results of the investigation indicated that regretfully a remarkable number of teachers possess much less than expected amount of both CK and PCK, which is also triggered by their amount of teaching experience. That is, the more years they teach, the more amount of CK and PCK they lose.

## 5.6 Discussion of the Results of the Fourth Hypothesis:

There are no statistical significant differences at the level (α≤0.05) in the mean scores of EFL teachers' pedagogical content knowledge   perceptions due to the number of workshops.

The results indicated that there were no statistical significant differences in the EFL teachers' pedagogical content knowledge  perceptions due to the number of workshops.

The researcher considers that  training workshops provide enormous benefits for the teachers, and they have a strong influence on the teachers' instructional practices. They provide them with new skills, teaching strategies, ways of assessments and a lot of countless benefits. But here, the result showed that these training workshops had no

influence on teachers' perceptions of their PCK. The researcher thinks that referred to several reasons, maybe the teachers have negative attitudes towards workshop attendance, and maybe they feel that these workshops are waste of time and they are obliged to attend them. It is known that workshops provide knowledge and skills, but maybe the EFL teachers didn't apply what they had learnt in these workshops or take them on seriously, like re-teach objectives, or improve teaching or trying new strategies and new activities they learnt in their classrooms. Moreover, teachers might haven't met regularly or for the allotted time of these workshops, or teachers didn't believe in the importance of these workshops for the students, because most of teachers always speak extensively about their frustrations with students' poor progress in assessments rather than focus on the real reasons for their low achievements and try to change their instructional practices. Another explanation for this result, that maybe the workshops which they attended were not affective and topics discussed were not about teaching strategies or student progress, or these topics were discussed superficially by teachers. Furthermore,  maybe these workshops were traditional and didn't address the holistic approach of PCK.

The findings agreed with the results of Yang's (2011) study which indicated that the training has no impact on teachers' PCK.

 Pitmann's (2015) study results revealed that the PLC meetings didn't appear to positively impact the development of the teachers' skills or build the knowledge they needed for teaching more effectively. They disagreed with the findings of Ayoubi and others (2012) study which its results indicated that teachers' beliefs about teaching and learning have changed away from the behaviorist towards more constructivist beliefs and their teaching practices have developed toward using more active teaching strategies. Also. it agreed with Miqdadi and Al-Omari (2014) study , and its results showed that workshop attendance affect teachers' perceptions of their PCK.

## 5.7 Discussion of the Results of the Fifth Hypothesis

There are no statistical significant differences at the level (α≤0.05) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to the supervising authority.

The results showed that there were differences at the level (α≤0.05) in the mean scores of EFL teachers' pedagogical content knowledge  perceptions due to the supervising authority, and these differences were in favor of private schools.

The researcher believes that the  educational environment in private schools is equipped to suit the academic outcomes, and the number of students is less than in public schools. Therefore, the teacher has more time to give the students the  attention needed, and to vary his instructional practices. Also, private schools system provide various educational options like international exchange program, freedom to develop their own curricula, as long as parents agree with the intellectual, philosophical or religious basis brought to the curricula. In addition, private schools hire the most qualified and competent teachers to attract the  largest number of students in order to achieve profits, since parents always pay for these private schools. Moreover, maybe the training programs in private schools address modern topics such as PCK.

The findings disagreed with Setiadi's and Musthafa's (2013) study which indicated that the public schools had an effect on teachers' PCK.

## 5.8 Interpretation of the Qualitative Results

Interview sessions with the six EFL teachers emphasized that having a pre- planning lesson was one of the important aspects  that EFL teachers must possess.

The researcher thinks that planning for lessons keep the teachers organized, and help them to be confident when they deliver the lesson and can face the difficulties that arise during the lesson. Moreover, it gives them the opportunity to think deeply about their instructional practices, their choice of objectives, activities that will meet these objectives, the materials needed, and estimate the time for each activity. A teacher who plans lessons carefully, will not waste class time flipping through  the course book, thinking about what to do next. Teachers who pointed out the importance of planning the lessons, gave the researcher a sign that they have positive perceptions about their PCK.

It is noted that some of lesson plans given by teachers lacked extra activities that address students' needs and interests. This indicates that teachers don't have enough knowledge about learners' needs and interests. Whereas, some teachers planned their lessons in accordance with the multiple intelligences, taking in consideration the learners' needs, interests and individual differences, and present the concepts in different ways to meet these interests.

Results indicate that teachers focus on the need of revising students in the previous lesson before moving towards a new topic. Revision refreshes the students' memories, reminding them about the content and topics of the previous lesson. It is also a way that helps students to develop their presentation skills and develop the speaking skill. Moreover, they get feedback from the teacher.

Teachers asserted on the necessity of integrating the four language skills while preparing and designing activities. It is important to choose instructional materials and activities that promote the integration of the four English language skills:

listening, speaking, reading and writing. It creates a communicative classroom environment that engages students to enhance their language abilities. Thus, students can use the English language effectively in communication.

Interview results showed that teachers have the ability to identify the misconceptions while they teach  a topic, and they used many strategies to correct these misconceptions. The researcher points out that false understanding of the concept get in the way of acquiring new knowledge, and one of the EFL teachers' missions is identifying these misconceptions, guide her\ his students to recognize them, provide ways and effective instructional strategies to change these misconceptions, and to make sure that they have a correct understanding of these misconceptions. Some  teachers used ways to fix misconceptions such as memorization and tests. From the researcher's point of view, these ways are not real solutions to deal with the challenging concepts,  conceptual change is not an easy process, it takes time. Students may forget the concepts quickly. Other teachers mentioned that they use discussion strategy as a way in fixing misconceptions, this strategy can

reinforce the learning process, and allows the misconceptions to be changed. Also, teachers gave ways in developing students' ideas as they move towards understanding / mastering the concepts such as: group discussions, doing projects and researches and designing games and competitions. The researcher considers these strategies fruitful and effective, because they motivate and engage the students in learning. Moreover, students will learn more through personal experiences, and they will be encouraged to take the ownership of their learning. Some teachers could identify students' misconceptions but they didn't give real solutions to correct them, and the result agreed with Mark (2000).

The results also indicated that teachers use different techniques in exploring the students' interests like talking with them, designing and suggesting activities, reading and writing texts and using the suggestion box.

Talking with students is necessary. Through talking students can show their personalities by expressing themselves, they will speak as confident, and based on talking can help the teacher to decide various strategies to help students to learn. Further, the teacher can understand students' strength, weakness and help them to be successful academically. For the suggestion box, the researcher considers this way helpful in discovering the students' interests and needs, by let the students at the end of the lesson to write anything they want, like what learning problems they have, their hobbies and their opinions in the teachers' performance and drop these writings in the suggestion box. The teacher can benefit from this way and improve her\his instructional practices. In addition, it helps shy students to express themselves without feeling embarrassed. The purpose of exploring students' interests is to understand the students learning styles and their needs, participate the teachers in choosing objectives, activities, materials and the learning teaching process.

Students will be motivated and engaged in these activities eagerly. Thus, the teacher will take this information into account during planning lessons and improving her\his instructional practices.

Interview sessions also indicated that teachers use various strategies in their classrooms such as: group work, doing projects, discussion, peer tutoring and cooperative learning. Furthermore, there are some difficulties that face teachers in applying new teaching strategies like overcrowded classrooms and lack of motivation in participating in the activities.

It is noted that some teachers couldn't choose appropriate teaching strategies to teach topics because of some difficulties arising while applying these strategies such as: the crowded classes of students, students' poor achievement and having problems and difficulties, and students' low motivation.

It is clear that EFL teachers have heavy teaching loads that prevent using teaching strategies. EFL teachers teach at least 26 periods a week, they correct notebooks, mark the exams, solve problems and other assigned duties in 26 classes a week, they are responsible to teach English language for large number of young learners who are in the most cases suffer from language learning difficulties. Such an exhausting working day may not allow teachers to think about using new teaching strategies in the classrooms. But these are not excuses to blame students for not participating in activities, most of the teachers put the burden on the students for not having effective lessons or participating in the activities prepared, and ignoring that one of the teachers' missions is motivating the students to take

part in the activity eagerly, and they have to search for the reasons behind students' reactions, and try to fix their  instructional practices in the classroom.

 Interview results also indicated that teachers stated several ways in assessing students like daily exams, undertaking speaking activities such as making interviews, conversations and real life situations, writing texts and reports and worksheets, and they diversify the exams' questions to suit the students' levels and need.

The researcher elicits  from these answers that all  teachers had agreed on using tests as a way in assessing the students' performance, and three  teachers didn't give clear idea about the authentic evaluation, EFL teachers should possess knowledge of  assessments and authentic evaluation, because they give real data about students'  performance. The rest of teachers had talked about authentic evaluation and gave examples like using presentations, observations and making dialogues: Their answers reflected that they can realize what is the suitable way for assessing students. Some teachers mentioned that they use real life situations as a way in applying students' skills they have learned in classrooms. Using realia or real life situations gives students the chance to practice real life situations, such as bringing maps and asking or giving directions and binging a menu and pretending that they are at the restaurant and then ordering food using foreign language, so they will feel more confident in speaking skill. Moreover, using this way will create excitement among students, and will make learning fun and joyful instead of traditional activities.

## 5.9 Conclusion

The study revealed the perceptions of EFL teachers about PCK. Through the use of questionnaire and  interview, it was possible to determine the similarities and differences between the results of the two instruments.

**The questionnaire and the interview results are in consistence with the following areas:**

1- The interview results have asserted that teachers prepare activities which integrate the four English language skills and provide opportunities for the students to practice them, and that match with the results gathered by the questionnaire.

2- Interviewees' responses have also shown the same results of the questionnaire concerning  identifying the students' misconceptions while they are teaching a new topic.

3- Teachers had  an agreement in the two instruments that they know how to assess students' performance in the classroom, and their questions can evaluate their understanding, and they diversify the exams questions to suit the students' levels and interests. In addition, they use realia or real life situations as a way in which students can apply the skills they had learnt in the classroom, and these reflects the daily life of the students.

4- Another matching point between the  questionnaire and the interview results are both instruments, participants  showed the ability to develop class activities and projects to help students in the learning process.

5- Results of the interview and the questionnaire showed that the teachers were knowledgeable in their discipline, and used different teaching strategies to teach the content, and they could determine the difficulties that arise during the lesson.

6- Four interviewees had more than 10 years of teaching experience had positive perceptions about their PCK, and that is agreed with the questionnaires' result in which there were significant differences in the perceptions of EFL teachers' perceptions of PCK due to the years of experience, and these differences were in favor of years of experience for more than 10 years.

7- Results of the questionnaire revealed that there were no differences in the EFL teachers' pedagogical content knowledge in perceptions due to gender. From the interviews, there could not be seen any differences between male and female perceptions about PCK. All the participants from both sexes agreed on several common ideas in all domains.


**The results between the two instruments were inconsistence with these points:**

1- Interviewees' responses indicated that some teachers could prepare lesson plans considering the students' needs, levels and interests. Moreover, they mentioned that they prepare activities that fit these interests. Whereas, the questionnaire respondents indicated that they couldn't make lesson plans that take into account the students' needs, levels and interests.

2- Two of the interviewees cited that they teach the concept in multi representations such as: charts, pictures, videos, etc.. Whereas, the majority of the questionnaire's respondents agreed that they didn't teach the concepts in multi representations.

3- Interview results revealed that some teachers couldn't select the appropriate teaching method for teaching because of some difficulties that occur while they teach so, they went on using the traditional teaching strategies. By contrast, in the questionnaire, most teachers stated that they could select the appropriate teaching method for using it in teaching the topics.

4- Two of the interviewees were master degree holders. They had positive perceptions about their PCK. The researcher elicited from their answers that they had knowledge in learners, assessment, content and pedagogy. Meanwhile, in the questionnaire, the results showed that there were no significant differences in the perceptions of the EFL teachers about their PCK due to qualification.

5- For interviewees who were taught in private and public schools, the results showed that teachers have equal perceptions about PCK. Whereas, in the questionnaire the results showed that there were differences in EFL teachers' pedagogical content knowledge perceptions due to the supervising authority, and these differences were in favor of private schools.

## 5.10 Recommendations

1- The researcher recommends the use of various instruments including field observations to assess the PCK teachers possess.

2- The researcher recommends to re-evaluate the effectiveness of pre-service and in-service teacher preparation programs in promoting PCK.

3- Conduct new research using different variables.

4- Making meaningful and effective workshops that focus on teaching strategies ,student progress and the learners' needs and interests.

5-. The researcher recommends involving pre- service and  in-service teachers in continuous training and professional development programs to keep them informed and up- to-date in both content and pedagogy.

6- To improve pedagogy, professional developments programs should pay attention to develop teachers' understanding of the constructivist conceptions of teaching and learning, and consequently should focus on planning and implementing the active and student-centered teaching strategies and not to forget integrating technology in their teaching.

7- The organization of workshops and any other forms of in-service training should be targeted toward exposing EFL teachers to the various PCK components to support their PCK which in turn will enhance the effectiveness of teaching English language.

8- Future research should be conducted on improving PCK for university educators since they are the ones who are in direct contact with the future teachers and responsible for their preparation for teaching.

9- The researcher recommends making training courses to train the teachers to use the authentic evaluation instead of the traditional ways in assessing  students' performance.

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**Appendix No. 1 EFL teachers' perceptions about their PCK questionnaire in English.**

**Questionnaire on English Teachers' Pedagogical Content Knowledge perceptions**

**Dear teacher:**

The purpose of this study is to **investigate the extent of EFL teachers' pedagogical content knowledge perceptions in the upper elementary schools level**. The information gathered is only used for educational research purposes and has no relation to the evaluation of your teaching ability and teaching performance in school. All results will be kept confidential .Please read the paragraphs of this questionnaire and answer them. Your cooperation will be appreciated.

**Part one:**

Place an  (x) in front of a suitable answer:

**Gender**  :   Female (   )                    Male (    )

**Qualification**  :

 Diploma  (  )                    BA (  )                    M.A(   )

**Years of experience**:

Less than 5 years  (  )      5-10 years  (  )      More than 10 years(  )

**Number of workshops you had  taken**:

Less than 3   (   )                3-5  (  )        More than 5 (    )

**Type of school you teach at**:

Public school    (    )                    Private school (     )

Part two: Put a sign (x) in front of each paragraph and under the degree, to which it deems appropriate depending on your own judgment.

| | No. | Item | Strongly agree | Agree | undecided | Strongly disagree | Disagree |
|---|---|---|---|---|---|---|---|
| | 1. | I know the content of what I am teaching. | | | | | |
| | 2. | I know the critical points of my lessons. | | | | | |
| | 3. | I know how theories and principles of the subject have been developed. | | | | | |
| | 4. | I know the basic definitions in my lesson. | | | | | |
| | 5. | I pursue the last improvement regarding teaching lessons. | | | | | |
| Content Knowledge | 6. | I can recognize lacking areas related to my lessons. | | | | | |
| | 7. | I attend conferences and activities in my content area. | | | | | |
| | 8. | I can develop class activities and projects. | | | | | |
| | 9. | I keep–up – to date with resources (books, journals etc) in my content area. | | | | | |
| | 10. | I gain deeper understanding about the content of my teaching subject. | | | | | |
| | 11. | I can explain clearly the content of the subject. | | | | | |

| | No. | Item | Strongly agree | Agree | Undecided | Strongly disagree | Disagree |
|---|---|---|---|---|---|---|---|
| | 12. | My questions evaluate students' understanding of a topic. | | | | | |
| | 13. | I know students' learning difficulties of the subject before class | | | | | |
| | 14 | My students clearly understand the objectives of this course. | | | | | |

| | No. | Item | Strongly agree | Agree | Undecided | Strongly disagree | Disagree |
|---|---|---|---|---|---|---|---|
| Pedagogical knowledge | 15. | I realize the difficulties of students during my lesson | | | | | |
| | 16. | I prepare an appropriate lesson plan in accordance with the point that students may be pressured in my lessons. | | | | | |
| | 17. | I determine the misconceptions of students while teaching new topics | | | | | |
| | 18. | I select problems suitable for teaching contexts in my lesson. | | | | | |
| | 19. | I use realia( real-life)objects as an instructional aids. | | | | | |
| | 20. | I establish opportunities for students to interact. | | | | | |

| | No. | Item | Strongly agree | Agree | Undecided | Strongly disagree | Disagree |
|---|---|---|---|---|---|---|---|
| | 21. | I establish opportunities for students to speak to reinforce learning. | | | | | |
| | 22. | I provide oral instructions that are clear and appropriate. | | | | | |
| | 23. | I create opportunities for students to practice their oral English. | | | | | |
| | 24. | I create opportunities for students to practice their written English. | | | | | |
| | 25. | I provide various formats of assessments according to student's intelligence. | | | | | |

| | No. | Item | Strongly agree | Agree | Undecided | Strongly disagree | Disagree |
|---|---|---|---|---|---|---|---|
| | 26. | I understand concepts that exemplify with daily life for students in the lesson. | | | | | |
| | 27. | I use effective teaching methods and techniques to use for the topic. | | | | | |
| | 28. | I select the appropriate teaching method for standards. | | | | | |
| | 29. | I take precautions determining the individual differences of students. | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pedagogical Content knowledge | 30. | I know how to assess students' performance in the classroom. | | | | | |
| | 31. | I organize a suitable learning environment for students. | | | | | |
| | 32. | I control negative situations while teaching. | | | | | |
| | 33. | I connect with students outside of the classroom. | | | | | |
| | 34. | I begin different activities which motivate students for lessons. | | | | | |
| | 35. | I use awards, punishments and reinforces effectively. | | | | | |
| | 36. | I construct a democratic environment that enables the self-expression of students. | | | | | |
| | 37. | I use time effectively in the lesson | | | | | |
| | 38. | I use suitable learning and teaching instruments. | | | | | |
| | 39. | I use my voice in the classroom effectively. | | | | | |
| | 40. | I support subjects in my content area with outside( out-of-school) activities. | | | | | |
| | 41. | I present systematically in contexts of lessons( from concrete to abstract or from easy to hard). | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 42. | I control my emotions during lessons. | | | | |
| | 43. | I have knowledge about learning theories. | | | | |
| | 44. | I make connections among related subjects in my content area. | | | | |
| | 45. | I use questioning technique during lesson. | | | | |
| | 46. | I teach concepts using multi representation such as tables, diagrams, graphic and equation etc. | | | | |
| | 47. | I prepare lesson plans covering the important points of topics. | | | | |

**Appendix No.2: EFL teachers' perceptions about their PCK questionnaire in Arabic**



جامعة القدس

عمادة الدراسات العليا

ماجستير في أساليب التخصص

أداة الدراسة / استبانة لمعرفة إدراك معلمي اللغة الانجليزية لمحتوى المعرفة البيداغوجي

السادة المحكمين.. تحية طيبة وبعد :

تقوم الباحثة بإجراء دراسة بعنوان : مدى إدراك معلمي اللغة الانجليزية في المرحلة الأساسية العليا لمعرفة المحتوى البيداغوجي PCK في منطقة بيت لحم التعليمية .

وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في أساليب التدريس من

جامعة القدس/ أبو ديس.

وقد قامت الباحثة بتطوير هذه لاستبانه لتحقيق أهداف الدراسة وعليه نرجو من حضرتكم التكرم بتحكيمها وإبداء الآراء في ضوء خبرتكم من حيث :

١- مدى ملائمة الفقرات لموضوع البحث.

٢- دقة وسلامة الفقرات لغوياً وعلمياً.

٣- كفاية عدد الفقرات و ملائمتها للمعلمين.

٤- إجراء ما ترونه لصالح الدراسة من إضافة أو حذف أو تعديل.

نشكر لكم تعاونكم لما فيه خير للبحث التربوي وتطويره نحو الأفضل .

استبانه لمعرفة مدى إدراك معلمي اللغة الانجليزية في المرحلة الأساسية العليا لمعرفة المحتوى البيداغوجي PCK في منطقة بيت لحم التعليمية

عزيزي المعلم:

تهدف هذه الدراسة لمعرفة مدى إدراك معلمي اللغة الانجليزية في المرحلة الأساسية العليا لمعرفة المحتوى البيداغوجي PCK في منطقة بيت لحم التعليمية. أرجو منك قراءة العبارات بتمعن، علماً بان المعلومات التي ستعطيها ستعامل بسرية تامة ولن تستخدم إلا لأغراض البحث العلمي.

الجزء الأول: المتغيرات المستقلة

يرجى وضع إشارة (X) في المكان الذي تراه مناسباً

**الجنس:** أنثى ( )          ذكر( )

**المؤهل العلمي:** دبلوم ( )     بكالوريوس( )     ماجستير ( )

**سنوات الخبرة:** أقل من ٣ سنوات( )   من٥ إلى ١٠ سنوات ( )   أكثر من ١٠ سنوات( )

**عدد الدورات التدريبية:** أقل من ٣ دورات( ) من ٣-٥ دورات( ) أكثر من ٥دورات( )

**نوع المدرسة:** حكومية ( )          خاصة ( )

**الجزء الثاني: أمامك ٤٧ فقرة يرجى قراءتها بتمعن ووضع إشارة ( X) أمام العبارة التي ترها مناسبة**

| | الرقم | العبارة | موافق بشدة | موافق | محايد | معارض | معارض بشده |
|---|---|---|---|---|---|---|---|
| معرفة المحتوى | ١ | أعرف جيداً المحتوى الذي أقوم بتدريسه. | | | | | |
| | ٢ | أعرف النقاط الحرجة في دروسي. | | | | | |
| | ٣ | أعلم كيف طورت النظريات والمبادئ حول هذا الموضوع. | | | | | |
| | ٤ | أعرف التعريفات الأساسية في درسي. | | | | | |
| | ٥ | أتابع التحسينات الحديثة للدروس التي أعلمها. | | | | | |
| | ٦ | يمكنني التعرف على المجالات التي تفتقر إلى الدروس المتعلقة بي. | | | | | |
| | ٧ | أتابع المؤتمرات والأنشطة في مجال المحتوي الخاص بي. | | | | | |
| | ٨ | يمكنني تطوير الأنشطة والمشاريع الصفية | | | | | |
| | ٩ | أواكب الموارد (الكتب والمجلات وغيرها) في مجال المحتوى الخاص بي | | | | | |

| معارض بشدة | معارض | محايد | موافق | موافق بشدة | العبارة | الرقم | |
|---|---|---|---|---|---|---|---|
| | | | | | اكتسب فهم أعمق لمضمون موضوع التدريس. | ١٠ | |
| | | | | | يمكنني ان اشرح بوضوح مضمون أي موضوع يخص تخصصي. | ١١ | |
| | | | | | أسئلتي تقيم فهم الطلاب للموضوع. | ١٢ | |
| | | | | | أعرف صعوبات التعلم لدى الطلاب في الموضوع قبل البدء بالدرس. | ١٣ | |
| | | | | | يفهم طلابي بوضوح أهداف الكتاب المدرسي. | ١٤ | |

| معارض بشدة | معارض | محايد | موافق | موافق بشدة | العبارة | الرقم | |
|---|---|---|---|---|---|---|---|
| | | | | | أدرك الصعوبات التي تواجه الطلاب خلال درسي. | ١٥ | |
| | | | | | أعد خطة درس ملائمة انطلاقاً من أن الطلاب قد يتعرضون للضغوط في دروسي. | ١٦ | المعرفة البيداغوجية |
| | | | | | أحدد المفاهيم الخاطئة للطلاب أثناء تدريس مواضيع جديدة. | ١٧ | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | أختار مواضيع مناسبة لتدريس السياقات في درسي. | ١٨ |
| | | | | | أستخدم مواداً حقيقية في تدريس دروسي كوسائل تعليمية. | ١٩ |
| | | | | | أنشئ فرصاً للطلاب ليتفاعلوا. | ٢٠ |
| | | | | | أخلق فرصاً للطلاب للتحدث لتعزيز التعلم. | ٢١ |
| | | | | | أقدم توجيهات شفوية واضحة ومناسبة. | ٢٢ |
| | | | | | أخلق فرصاً للطلاب لممارسه لغتهم الإنجليزية الشفهية. | ٢٣ |
| | | | | | أخلق فرصاً للطلاب لممارسة اللغة الإنجليزية المكتوبة. | ٢٤ |
| | | | | | أقدم أشكالاً مختلفة من التقييمات وفقًا لذكاء الطالب. | ٢٥ |

| معارض | معارض بشدة | محايد | موافق | موافق بشدة | العبارة | الرقم | |
|---|---|---|---|---|---|---|---|
| | | | | | أفهم جيداً المفاهيم التي تجسد الحياة اليومية للطلاب في الدرس. | ٢٦ | |
| | | | | | يمكنني استخدام أساليب التدريس والتقنيات الفعالة لاستخدامها في هذا الموضوع المراد تدريسه. | ٢٧ | |
| | | | | | أختار طريقه التدريس المناسبة وفقاً لمعايير محددة. | ٢٨ | معرفة المحتوى البيداغوجي |
| | | | | | أتخذ الاحتياطات اللازمة عند تحديد الفروق الفردية للطلاب. | ٢٩ | |
| | | | | | اعرف كيفية تقييم أداء الطلاب في الصف المدرسي. | ٣٠ | |
| | | | | | أنظم بيئة تعليمية مناسبة للطلاب. | ٣١ | |
| | | | | | أسيطر على المواقف السلبية أثناء التدريس. | ٣٢ | |
| | | | | | أتواصل مع الطلاب خارج الصفوف الدراسية. | ٣٣ | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | أبدا بالأنشطة المختلفة التي تحفز الطلاب علي الدروس. | ٣٤ | |
| | | | | | يمكنني استخدام الجوائز والعقوبات والتعزيز بشكل فعال. | ٣٥ | |
| | | | | | لدي القدرة على بناء بيئة ديمقراطية تمكن الطلاب من التعبير عن الذات. | ٣٦ | |
| | | | | | يمكنني استخدام الوقت بشكل فعال في الدرس. | ٣٧ | |
| | | | | | يمكنني استخدام الأدوات التعليمية المناسبة. | ٣٨ | |
| | | | | | أستخدم صوتي بشكل فعال. | ٣٩ | |
| | | | | | أقوم بدعم المواضيع في مجال المحتوي الخاص بي مع الأنشطة الخارجية (خارج المدرسة). | ٤٠ | |
| | | | | | أقدم الدرس بشكل منهجي (من المجرد إلى المحسوس أو من السهل إلى الصعب). | ٤١ | |
| | | | | | أتحكم في عواطفي اثناء الدروس. | ٤٢ | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | لدي معرفه عن نظريات التعلم. | ٤٣ |
| | | | | | | أقوم بالتوفيق بين الموضوعات ذات الصلة في مجال المحتوى الخاص بي | ٤٤ |
| | | | | | | أستخدم مهارة طرح الاسئلة أثناء الدرس. | ٤٥ |
| | | | | | | أقوم بتعليم المفاهيم باستخدام العروض المتعددة مثل الجداول والرسوم البيانية والرسوم والمعادلات الخ. | ٤٦ |
| | | | | | | أعد خطة درس تغطي النقاط الهامه من المواضيع. | ٤٧ |

**Appendix No. 3: Interview in English.**


**Interview questions**


1 . Would you describe the process you go through when you plan and teach a specific topic? (content knowledge)

2 . a) Can students misunderstand  specific concepts of your lesson?

how do you usually discover these misconception?

c) What are some examples of how approach teaching strategies used in teaching challenging concepts ?

d) Would you describe  some ways that help students develop their own ideas as they moved towards understanding/mastering concept?

3- In your class, in what ways do students investigate their own interests and in what ways do these interests align with  individual differences?

4-  Would you mention some collaborative and individual strategies you use to support your students learning, and describe them?

5-  a) What are the ways in which students establish objectives, monitor their learning and apply the skills they have learned?

b) Do you try to diversify questions while designing your exam?

 c) What do you know about authentic evaluation? Can you give some examples?

**Appendix No.4: Interview in Arabic**



جامعة القدس

عمادة الدراسات العليا

ماجستير في أساليب التخصص

أداة الدراسة/ مقابلة لمعرفة إدراك معلمي اللغة الانجليزية لمحتوى المعرفة البيداغوجي

السادة المحكمين.. تحية طيبة وبعد :

تقوم الباحثة بإجراء دراسة بعنوان : مدى إدراك معلمي اللغة الانجليزية في المرحلة الأساسية العليا لمعرفة المحتوى البيداغوجيPCK  في منطقة بيت لحم التعليمية.

وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في أساليب التدريس من جامعة القدس/ ابو ديس.

وقد قامت الباحثة بتطوير هذه المقابلة لتحقيق أهداف الدراسة وعليه نرجو من حضرتكم التكرم بتحكيمها وإبداء الآراء في ضوء خبرتكم من حيث :

١- مدى ملائمة الأسئلة لموضوع البحث وملائمتها للمعلمين .
٢- دقة وسلامة الأسئلة لغوياً وعلمياً.
٣- إجراء ما ترونه لصالح الدراسة من إضافة أو حذف أو تعديل.

نشكر لكم تعاونكم لما فيه خير للبحث التربوي وتطويره نحو الأفضل .

أسئلة المقابلة

السؤال الأول : هل يمكنك وصف العملية التي تمر بها عند تخطيط وتدريس موضوع محدد؟( معرفة المحتوى).

السؤال الثاني : أ .هل يمكن للطلاب أن يخطئوا فهم بعض المفاهيم المحددة لدرسك ؟

ب . كيف يمكنك عادةً اكتشاف هذه المفاهيم الخاطئة ؟

ج. ما هي بعض الأمثلة علي كيفية استخدام الاستراتيجيات التدريسية المستخدمة في تدريس المفاهيم الصعبة ؟

د. هل يمكن أن تصف بعض الطرق التي تساعد الطلاب على تطوير أفكارهم الخاصة لفهم / إتقان مفهوم ما ؟

السؤال الثالث : في صفك، ما هي الطرق التي يحقق بها الطلاب اهتماماتهم الخاصة، وكيف تتناغم هذه الاهتمامات مع الفروق الفردية؟

السؤال الرابع : يرجى ذكر بعض الاستراتيجيات التعاونية والفردية التي تستخدمها لدعم تعلم الطلاب. وصف لنا هذه الطرق.

السؤال الخامس : ا . ما هي الطرق التي يتم بها تحقيق أهداف الطلاب ، ورصد تعلمهم وتطبيق المهارات التي تعلموها ؟

ب . هل تحاول تنويع الأسئلة حين تصميم الامتحان الخاص بك ؟

ج. ما الذي تعرفه عن التقييم الحقيقي ؟ هل يمكنك إعطاء بعض الأمثلة ؟

Appendix No. 5 Permission of the Faculty of Educational Sciences \ Graduate Studies Program at Al-Quds University.

بسم الله الرحمن الرحيم

**Al-Quds University**
Faculty of Educational Science
**Graduate Studies Programs**

جامعة القدس
كلية العلوم التربوية
برامج الدراسات العليا

التاريخ : 2017/8/30

حضرة السادة/ مديرية التربية والتعليم المحترمين

محافظة بيت لحم

الموضوع : تسهيل مهمة

تحية طيبة وبعد،،

تقوم الطالبة: ورقمها الجامعي مثال ابراهيم محمد ذويب    (21510854)، بأجراء دراسة بعنوان:

**The extent of EFL teachers pedagogical content Knowledge perceptions in the upper elementary Schools Level in Bethlehem district**
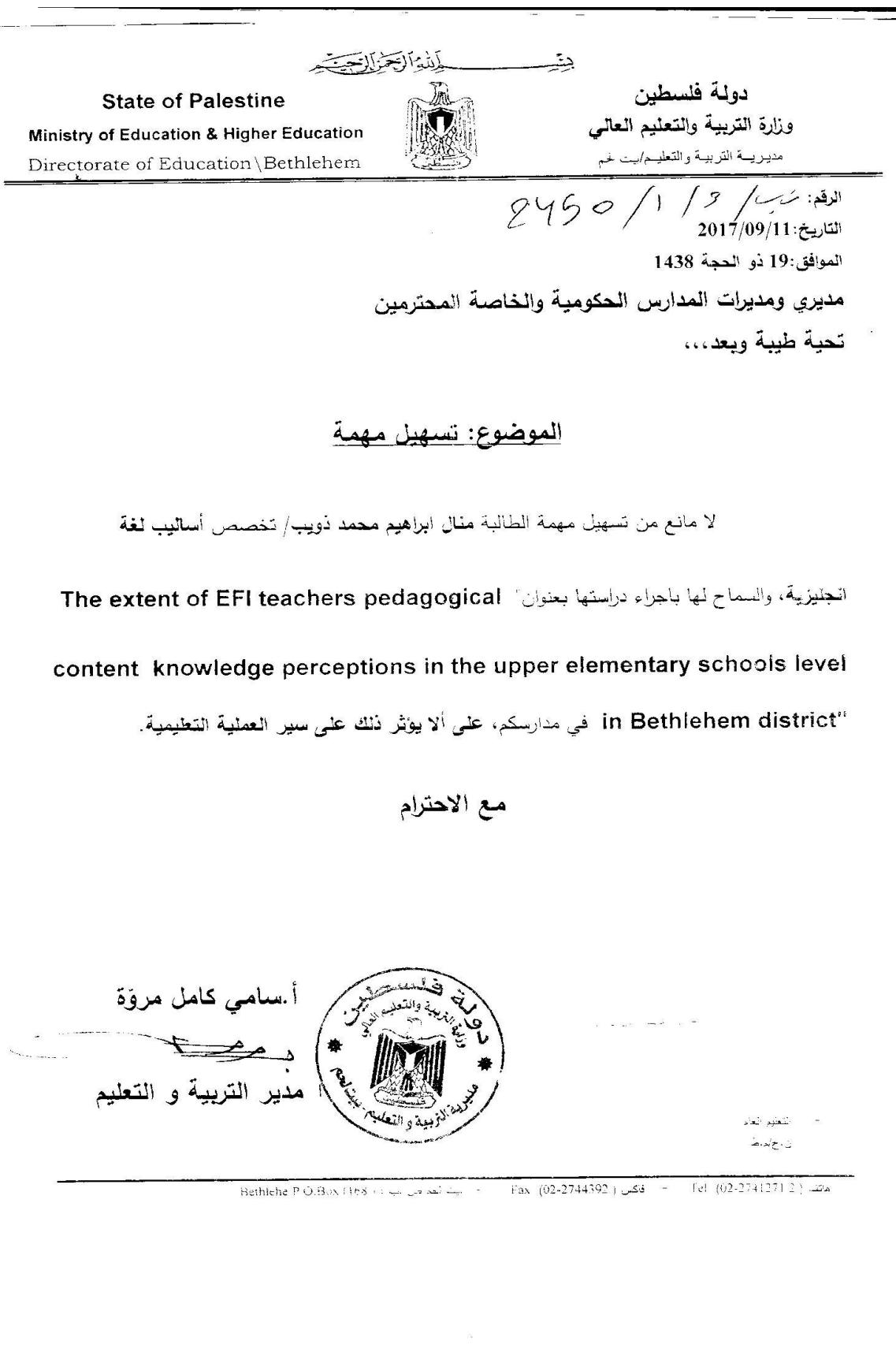
لذا نرجو من حضرتكم تسهيل مهمة الطالبة المذكورة أعلاه وذلك لتطبيق الدراسة خلال الفصل الدراسي الحالي .

شاكرين لكم حسن تعاونكم

د. ايناس ناصر
عميدة كلية العلوم التربوية

Appendix No. 6 Permission of the Directorate of Bethlehem Educational District.

**State of Palestine**
**Ministry of Education & Higher Education**
Directorate of Education\Bethlehem

دولة فلسطين
وزارة التربية والتعليم العالي
مديرية التربية والتعليم/بيت لحم

الرقم: مس/ م/ ١
التاريخ: 2017/09/11
الموافق:19 ذو الحجة 1438

مديري ومديرات المدارس الحكومية والخاصة المحترمين

تحية طيبة وبعد،،،

**الموضوع: تسهيل مهمة**

لا مانع من تسهيل مهمة الطالبة منال ابراهيم محمد ذويب/ تخصص أساليب لغة

انجليزية، والسماح لها باجراء دراستها بعنوان The extent of EFI teachers pedagogical

content knowledge perceptions in the upper elementary schools level

in Bethlehem district" في مدارسكم، على ألا يؤثر ذلك على سير العملية التعليمية.

مع الاحترام

أ. سامي كامل مروّة

مدير التربية و التعليم

Bethlehe P.O.Box 1168    Fax (02-2744392) فاكس   Tel (02-2741271 2) هاتف

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Appendix No.7

List of  Validation Committee

| No | Name juror | Place of work | Specialization | PCK questionnaire | Interview |
|---|---|---|---|---|---|
| 1. | Dr. Muhsen Adas | Al-Quds university | Teaching methods | ✔ | ✔ |
| 2. | Dr. Ghassan Sirhan | Al-Quds university | Teaching methods | ✔ | ✔ |
| 3. | Dr. Afif Zeidan | Al-Quds university | Teaching methods | ✔ | ✔ |
| 4. | Dr. Inas Naser | Al-Quds university | Teaching methods | ✔ | ✔ |
| 5. | Dr. Jamal Nafi' | Al-Quds university | English literature | ✔ | |
| 6. | Dr. Manal Abu Munshar | Hebron university | Teaching methods | ✔ | |
| 7. | Dr. Huda Musleh | Bethlehem university | Teaching methods | ✔ | |
| 8. | Iman thweib | Directorate of Education/Bethlehem | Teaching methods | ✔ | |
| 9. | Yahia Al-tenih | Directorate of Education/Bethlehem | Teaching methods | ✔ | ✔ |
| 10. | Yousef Al-bow | Directorate of Education/Bethlehem | Teaching methods | ✔ | ✔ |