

Research Article

# An appraisal of Social Studies Teachers Perceptions of Teachers' Pedagogical Content Knowledge

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Abstract: The study objective was to assess the perceptions of Junior High School (JHS) Social Studies teachers in the Yilo Krobo Municipality of the Eastern Region of Ghana on teachers' Pedagogical Content Knowledge (PCK). The study adopted Shulman's theory of Pedagogical Content Knowledge (PCK) as its theoretical framework. The philosophical approach upon which the study is hinged on is the ideology of interpretivism and positivism, in other words, pragmatism. The study used a mixed methodological approach as well as a descriptive survey design. A random sampling technique was used for the study. The study participants were JHS social studies teachers in Yilo-Krobo Municipality, Ghana. Eighty (80) out of the one hundred and two (102) representing 78.43% JHS Social Studies teachers were selected from the fifty-four JHSs in the Municipality. Both Questionnaire and interview guide were used for data collection. The survey data was analyzed using descriptive statistics and the interview data was analyzed using content analysis. The study indicated that at the heart of the PCK concept is the idea that 'deep knowledge' of content is essential for effective teaching and cannot be taken for granted; that it has a significant bearing on teaching and student learning, and that it is used as a cadre to define professional teaching knowledge. PCK also provides the uniquely necessary knowledge for the transformation of the different types of knowledge required for Social Studies teaching and evolves over time due to the progressive awareness of students' needs, while a wealth of content knowledge is imperative for the development of a comprehensive pedagogical content knowledge. The paper recommends that the Ghana Education Service (GES) should conduct regular in-service training for teachers on the enhancement of their PCK, to enable them select appropriate TLMs and pedagogical approaches that foster meaningful learning for students.

**Keywords:** Perceptions, Pedagogical Content Knowledge (PCK), Social Studies, Junior High School (JHS) Teachers

## 1. Introduction

The National Council for Social Studies (NCSS) says that a powerful and effective education in Social Studies starts with a deep understanding of the subject and its distinctive purposes. Social Studies education prepare students on how to find, understand, and deal with the problems that diverse countries face in a world that is becoming more and more interconnected [1]. A study maintains that Social Studies should provide learners with indispensable competences that will be pertinent for daily life instances. These include knowledge on how to cast one's vote and knowing one's social welfare entitlements, thinking critically and on how to apply methods. This insight has gained pertinence within the very recent curriculum, according to which students would

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**Copyright:** © 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses /by/4.0/). have to acquire relevant know-hows in order that one can cope socially and politically. The goal of Social Studies instruction to make a learner reflect on his own action as well as on the systems set in place socially and politically speaking. Students have to comprehend that behaviour as a factor and political institutions as another, are not just fixed, but are subjected for assessment as well as change [2]. This entails knowledge about the social and political framework and about one's own place in it. It also necessitates skills and ability to collaborate with actors other than oneself, as well as methods and skills in assessing information in an independent way.

A researcher indicate that school textbooks tend to be moralising and unilaterally biased and that the teachers do not seem to be able to teach Social Studies in a reflective way [3]. Teachers should be able to teach from a variety of perspectives even if the textbooks don't include all of the information they need to do so. In this context, the idea of a "Deliberative Democracy" should be of central importance [3]. This means that Social Studies textbooks will not make a person a good teacher, nor will they ease the teaching of the subject. Again, the textbooks will not empower a teacher to instruct effectively in achieving the intended objectives, which must be attained. Englund again asserted that students develop citizenship related skills when they are given the broader opportunity to engage in debating and understanding plural ideas and arguments: communication that involves the exchange and competition of different views of the world.

To teach all students according to the current state of standards, teachers need to have a deep appreciation of the subject matter in order to be able to assist learners create useful cognitive maps, to connect one idea to another and to reconcile misunderstandings. Teachers required to be conversant with how ideas from different domains are linked to day-to-day life. Pedagogical knowledge is built on this kind of understanding, which helps teachers make ideas more accessible to students [4]. Shulman spurred teachers' subject knowledge and its importance for successful teaching a coined and the term pedagogical content knowledge [5]. The key is content knowledge, which is relevant to the education process, involving the most suitable forms of presentation and delivery of information and how students best absorb the specific concepts and topics of a subject. The success of pre-service teachers depends on their ability to deal with both pedagogical content and general pedagogy at the same time [6].

'Pedagogical Content Knowledge' was to address some of the concerns of teaching and teacher education [6]. The paradox is that it is only indicated to explain that the content standard focuses on the content-specific aspect of the subject matter. There is a link between content knowledge and pedagogical knowledge in Social Studies teaching that is implied in many studies. A thorough reading reveals links between these two domains that cannot be dismissed. For example, the pedagogical standards suggest that teachers have a sense of how to organize classroom experiences. Planning to teach requires a thorough understanding of the content. "The key to distinguishing the knowledge base from instruction lies at the intersection of content and pedagogy" [7].

Researchers noted that, with pedagogical content knowledge in mind, effective teachers can have a rounded understanding of how they can effectively impart the material to students [4, 8]. Pedagogical content knowledge should include knowledge of students and their peculiarities, knowledge of pedagogical contexts, knowledge of pedagogical objectives, goals and values, and philosophical and historical context [4, 6, 7]. In addition, pedagogical content knowledge refers to the educators' competence to transform the contents into formats that are pedagogically effective while being relevant to the different abilities and backgrounds of the students [9]. As a core curriculum subject, Social Studies by its nature, demands that teachers be both innovative and responsive to current information and events, both locally and internationally. If learners in our education space are going to be seen as globally competitive, Social Studies teachers must be key actors of change, they need to adopt technology in their teaching and learning to enhance change socially. Teachers of Social Studies have to perceive the need for

refinement in the choice of teaching approaches as well as technologies pertinent for addressing content within plural approaches [10].

The motivation for the researchers on this study stems from their experiences as teachers in Basic Schools and as Social Studies students, at both undergraduate cum graduate educational levels. In addition to that is their admiration for good teaching and innovation in methodology. Social Studies typically lacks a specific curriculum that defines the subject's principal aim, focus, content and teaching methods [7]. Teachers' knowledge of the content of the Social Studies curriculum as well as the didactical approaches used to transfer this knowledge to learners is crucial to the success of the Social Studies curriculum. Teachers' content knowledge and training have been found to have a significant impact on their ability to implement curriculum innovations [7, 11]. Indeed, teachers with weak pedagogical knowledge may transmit misconceptions to students and use inappropriate materials and pedagogical approaches. In contrast, teachers with proper pedagogical knowledge are able to manage teaching aids, instruction and assessment effectively. Teachers' knowledge of content and pedagogy, thus, plays a crucial part in successfully implementing curriculum of Social Studies, which in turn has an impact on student learning outcomes. Knowledge required in order for one to teach Social Studies is considered to be foundational Social Studies knowledge necessary to accomplish the recurring tasks of Social Studies teaching". This knowledge is regarded as falling within the realm of content knowledge and pedagogical content knowledge. Research have brought to the fore that teachers' pedagogical knowledge is a predictive factor for pupils' performance in Social Studies [1, 7]. On the other hand, regardless of efforts to improve the teaching of Social Studies in Ghanaian basic schools, it appears that the main aims of the subject are not being achieved. Social Studies teachers in Ghana generally do not have sufficient pedagogical knowledge, which has a negative impact on the teaching of the subject [12].

### 1.1. The Statement of Research Problem

Social Studies content is taken from several disciplines of social sciences, yet not hinge-driven by any of the scientific disciplines. It should embrace the field traditionally combined with History, Civics, Economics, Geography, etc. If teaching these subjects is restricted to the transmission of diverse and inconsistent data, without throwing any light on social conditionality and issues without inspiring a will to alleviate the state of affairs, then, their educative significance would be negligible. All subjects studied should, thus, be seen as a compact whole whose goal is to fit students into their social milieu [13]. The teaching of Social Studies must include topics that enhance the creation of a well-informed and knowledgeable person who is able to comprehend contemporary issues, is prepared to fulfil his or her responsibilities as a citizen for the welfare of all, and has developed the perceptions, skills, and moral qualities that are so essential and valuable in a more democratic system [14]. This would increase the citizens' awareness in order to seek help or participate effectively in their activities to promote democratic good governance as a whole [15]. This is precisely what Shulman stated in his pedagogical content knowledge, that an effective teaching method entails the following: "is the way of presenting and formulating the subject that makes it understandable to others ... an understanding of what makes learning certain subjects easy or difficult; the ideas and biases that students of different ages and backgrounds bring to the learning of the most commonly taught topics and lessons", and this represents a teacher who has a thorough knowledge of how to convey the material to the learners [16].

Teaching content in ways that are effective for a variety of students while also taking into account their diverse abilities and backgrounds is what is meant by a teacher having pedagogical content knowledge [9]. This implies that effective Social Studies teaching requires both content knowledge and pedagogical content knowledge. Thus, when teaching Social Studies concepts to students, both pedagogical and content knowledge is required. How teachers connect their specialist knowledge (what they know about what they teach) with their pedagogical knowledge (what they know about teaching) and how specialist knowledge is part of the pedagogical thought processes are seen as intrinsic to pedagogical content knowledge [17]. Teachers are seen as instrumental in implementing the ideals, goals and targets of the Social Studies curriculum [17]. Regardless of what the curriculum has suggested, it is the facilitator that makes the end decisions about what happens in the class setting, and therefore plays a crucial role in the implementation of the Social Studies curriculum. There are many Social Studies teachers who do not have the requisite knowledge to engage in both historic and evaluative thinking [18]. This would suggest a Social Studies teacher may have insufficient instructional insights as to how to successfully implement the academic curriculum of the college. Inadequate pedagogic understanding of Social Studies instruction has been identified as a barrier to achieving the aims of the junior high school Social Studies curriculum. There have been significant amounts of debate regarding the extent to which instructors who teach Social Studies are deficient in suitable instructional expertise and conceptual awareness [19].

Scholars believe that teachers' inadequate background of knowledge of content and of pedagogy contribute meaningfully to elementary school teachers' hesitancy and their eventual incapacity to carry out an effective delivery of Social Studies lessons in their classes [20]. Teachers' didactic proficiency in coaching and within the spectrum of facilitating learning in their subjects is scant. A serendipitous interaction of the researchers in certain public Junior High Schools in Yilo Krobo Municipality revealed that a number of teachers appeared to be deficient in proper pedagogical knowledge to ensure effectiveness in the delivery of the Social Studies subject. Literature has also indicated that the most influential driver in advancing the standard of delivery is the quality of the instructors [21]. A researcher acknowledges this view by asserting that national panels as well as reports have lamented the calibre of the faculty in contemporary decades [22]. A reviewed literature indicated there have been a number of studies on social studies in Ghana, though not explicitly on teachers' Social Studies teaching knowledge and practice. This is of particular interest given that a number of various stakeholders blame instructors of Social Studies for the perennial failure of students in examinations and also in the area of noticeable perennial lack of patriotism among Ghanaians. In this study context, the researchers sought to examine the perceptions of pedagogical content knowledge among JHS Social Studies teachers within the Yilo Krobo Municipality of the Eastern Region of Ghana.

# 1.2. Theoretical framework

It is not straightforward to finding or developing a theoretical basis for instructional design. Still, the theoretical pedagogical content knowledge model (TPACK) serves as a relevant type to guide technology usage within the classroom for Social Studies [23]. Teachers need to have a thorough content awareness as well as the awareness of relevant pedagogy for the finite goal of content delivery. It demanded emphasis on "teacher technical knowledge and pedagogy to be treated as mutually exclusive domains in research"[5]. He posited that the outcome for that exclusivities would be the productionrealisation of instructors who would focus either on disciplinary content or pedagogy [5]. In order to avoid such a situation, Shulman felt it imperative to conjoin the existing rapport between the two concepts through the introduction of Pedagogical Content Knowledge (PCK) as a notion. Nonetheless, it appears researchers and pedagogues still have to broaden the definition of this term, as technology has been brought into the 'initial rapport, that of content knowledge and pedagogical knowledge [5]. A study came up with a framework in theory towards integration of technology in education, known as 'Technological Pedagogical Content Knowledge ' or 'TPACK' [23]. This was done by having Shulman's formulation of 'Pedagogical Content Knowledge ' or 'PCK' as foundation but extending it towards a situation in which teachers would have to integrate technology into their pedagogy [5]. This framework is handy in capturing some vital qualities of teachers' knowledge necessary for the integration of technology into teaching, as they deal with the complex, multidimensional and situated nature of this knowledge. Reflexive pedagogical use of technology requires a construction of a complex yet situated form of knowledge, which is called Technological Pedagogical Content Knowledge (TPACK) [23]. By so doing, they make reference to the complex role and interaction between three principal components within learning environments: content, pedagogy and technology. The TPACK model represents "how teachers understand technologies and how Pedagogical Content Knowledge interacts with each other to enable effective teaching with technology" [23]. TPACK is acronym for Technology, Pedagogy, and Content Knowledge which has been heralded as the "Total PACKage" for effective teaching assisted by technology [24]. The interdependence of the three contributing knowledge domains (technology knowledge, content knowledge, and pedagogy knowledge) is what TPACK best reflects and is easier to bequeath through teaching as compared to TPCK (Mishra, personal communication) [24].

## 1.3. Pedagogical Content Knowledge (PCK)

Shulman conceptualised PCK as the strongest analogies, explanations, demonstrations and examples - in short, the ways by which the subject is systematically represented and expressed in order to render it understandable for learners. PCK is a strong mixture of different parts, namely content knowledge, pedagogical knowledge and student learning knowledge [5]. Pedagogical content knowledge refers to content knowledge that teachers have. While teachers, like non-pedagogical subject specialists, have in-depth knowledge of the essential facts, theories and methods of a particular scientific field, they also know how to present particular content in pedagogically suitable ways to a particular group of learners in particular educational contexts. This close link between content, learner, pedagogical and educational contexts is the PCK that make up the special professional knowledge of teachers [4, 7]. Educational content knowledge is a powerful construct for teachers to enhance their knowledge and professional development. In fact, teachers' knowledge can help learners understand and apply concepts, acquire specific skills, and develop values, attitudes, and interests to achieve educational goals in the cognitive, affective, and psychomotor domains [7].

The study used the theory in Mishra and Koehler's and extended it to the instances of instructors of Social Studies integrating technology into content and pedagogy in order to render teaching and learning effective as well as efficacious [23]. This means that any instructor with a social science background who wishes to integrate technology into their teaching practice must be competent in all three areas. To be successful, teachers must simultaneously address technology, content and pedagogy. These three knowledgedomain integrations in a simultaneous fashion, creates a Venn diagram with three overlapping circles. Focus here is centered on the "complex interplay" of these three knowledge domains (technology knowledge, content knowledge and pedagogical knowledge).

Figure 1 showcases the technological and pedagogical knowledge of instructors postured for effective instructional outcomes, i.e., when properly integrated [23].

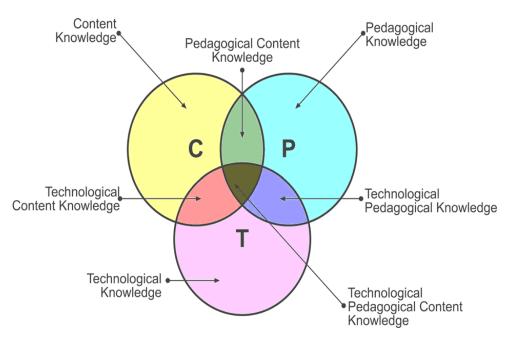


Figure 1. Pedagogical content knowledge Framework (source: [23])

## 1.4. Purpose of the Study

The study sought to assess the perceptions of JHS Social Studies teachers in the Yilo Krobo Municipality in the Eastern Region of Ghana on teachers' pedagogical content knowledge.

### 1.5. Research Question

What are the perceptions of JHS Social Studies teachers in the Yilo Krobo Municipality of the Eastern Region of Ghana on teachers' Pedagogical Content Knowledge (PCK)?

# 1.6. The Significance of the Study

The findings of the study will inform educational stakeholders in the Yilo Krobo Municipality about the perceptions that JHS Social Studies teachers have about teachers' pedagogical knowledge content. The results will also inform planners of in-service training programmes or workshops targeted at improving the PCK of Social Studies teachers and will complement existing literature with regards PCK in Ghana. The results will also provide an opportunity to revise the content for training programmes meant for instructors at college of education and university levels.

#### 2. Materials and Methods

# 2.1. Research Design

The study assessed the perceptions of JHS Social Studies teachers in the Yilo Krobo Municipality of the Eastern Region of Ghana on teachers' pedagogical content knowledge. For this study, a descriptive survey design was opted. Descriptive surveys provide researchers with an understanding into the present state of the situation in relation to the variables to be considered [25].

# 2.2. Population, sample and sampling techniques

The target group for this study included all the 102 JHS Social Studies teachers in the Yilo Krobo municipality. Eighty (80) respondents were selected using the random sampling technique and this constituted the sample size for the study. The random

sampling technique was appropriate because of the homogenous nature of the population. The population has homogenous elements; a small sample suffices [26]. However, for generalizability purpose, size of 78.43% was sampled from the target population.

# 2.3. Data collection

The main tools for the collection of data for this study were two -questionnaire and interview. They were both used to allow the researchers to triangulate the information in order to check how consistent the knowledge gained using each tool would be. "Triangulation in research involves checking the consistency of results obtained using different instruments". Therefore, it is essential to use distinct instrumentations in verifying information collected [27].

## 2.4. Questionnaire

Questionnaires were given to all the 80 JHS Social Studies teachers in the municipality sampled for the study to solicit their points of views on the subject matter. The survey instrument was adapted and modified to suite the nature of the study. It consisted of eight questions covering the research question. To ensure that data represented was accurate, the items on the questionnaire were ranked using a five-point Likert scale. Here are the numerical weights that the scales were assigned:

- Undecided- 1
- Completely Disagree-2
- Disagree- 3
- I am Okay -4
- I fully agree 5

Weights were added to obtain an average of acceptable means (1+2+3+4+5=15; 15/5=3). Thus, a mean of 3.10 and above means that respondents agree with the item, while a mean of 3.00 and below meant that the respondents did not agree with the item.

# 2.5. Validity and Reliability of Test Instruments

Both face and content validity were ensured. The researchers gave the questionnaire to an expert to go through. Face validity and content validity ensure that instruments measure what they are supposed to measure [28]. On the other hand, the test-retest procedure was used to determine the reliability of the instrument. After the instruments were given to the subjects twice, two weeks apart, the results of the two tests were correlated using Pearson's Product Moment Correlation (PPMC). A reliability coefficient of equal or more than 0.70 threshold is acceptable as a measure of reliability pointed out that the acceptable values of alpha, ranges from 0.70 to 0.95. The reliability coefficient for the current study is 0.76 thereby making the instrument for the study very reliable [29].

## 2.6. Interview

Five (5) out of the 80 respondents of the questionnaire were randomly selected for the study. Creswell explained that the same individuals for the sample of qualitative participants should be the ones in the quantitative sample. He added that mixed methods researchers would include sample of qualitative participants in larger quantitative sample [30]. This is because ultimately researchers compare the two databases, and the more similar they are, the better the comparison.

# 2.7. Data analysis

Descriptive statistics were used to analyse the data collected. Descriptive methods such as mean and standard deviations were used to respond to the question of research study.

# 3. Results and Discussions

The main objective of this research question was to assess the perceptions of JHS Social Studies teachers in the Yilo Krobo Municipality on teachers' Pedagogical Content Knowledge (PCK). Their answers are indicated in Table 1.

Item	Ν	Mean	<b>Standard Deviation</b>
At the heart of the PCK concept is the idea that 'deep knowledge' of content is essential for effective teaching and cannot be taken for granted.	80	4.0600	.79308
The pedagogical expertise of teachers, in particular, has a considerable influence on pupils teaching and learning.	80	4.3400	.68839
PCK has been used as a framework for defining professional knowledge in education	80	4.5400	.67643
PCK is a unique knowledge necessary for the transformation of different types of knowledge required for Social Studies education.	80	4.5000	.54398
The PCK of teachers is changing over time as they become more aware of the needs of students.	80	4.4800	.67733
In-depth knowledge of the content is essential for the development of a complete PCK	80	4.4400	.67491

# Table 1. Perceptions of JHS Social Studies teachers on teachers' Pedagogical Content Knowledge (PCK)

Source: Field data (2021)

The data in Table 1 indicates that 'central to the PCK philosophy is the idea that 'deep knowledge' of content is essential to effective teaching and learning and cannot be taken for granted', resulting in a response rate of (M = 4.06, SD = 0.79). This suggests that the underlying mechanism of PCK is that a thorough understanding of the given content is essential for effective teaching and learning. One respondent expressed support for this:

If a teacher knows the basic principles of a concept, he/she can find ways to teach it to learners. What kind of pedagogy does he/she rely on if he/she does not have CK? (Teacher 1).

Another also said:

It is content knowledge that drives the teacher to find ways of teaching concepts to students. If the teacher does not know what he/she is going to teach, but knows how to teach, what concept is he/she going to teach? Content knowledge (CK) is a prerequisite for developing pedagogical content. Content knowledge (CK) makes students aware of the principles behind the concepts and promotes conceptual meaning in students (teacher 5).

This means that teachers who wish to develop Pedagogical Content Knowledge (PCK) effectively must have advanced Content Knowledge (CK). This finding is consistent with the with previous study that fundamental to the PCK concept is the idea that 'in-depth knowledge' of content is essential for successful teaching and cannot be overlooked [31]. They, nevertheless, acknowledge that, following this breakthrough, a large number of teacher-candidates went on to study courses that separated content knowledge from the development of their teaching practice, thus preparing them for effective subject design. They concluded that the dichotomy between content and pedagogy may be as widespread in Social Studies education as in any other field, leading to a perception of a 'great divide' between teacher educators and their disciplinary peers [31]. An unfortunate circumstance that makes it needlessly difficult to provide new teachers with the training they require and deserve.

In addition, the data indicated that the teachers' knowledge of educational content has a significant impact on students' teaching and learning" (M=4.34, SD=0.69), indicating that respondents supported the statement that teachers' knowledge of educational content exerts a considerable influence on students' teaching and learning. There is a significant impact on student teaching and learning. One respondent expressed support for this assertion:

No one can question the fact that teachers' Pedagogical Content Knowledge (PCK) does not have a direct influence on students' academic performance, as it plays an important role in their ability to apply what they have learned (teacher 2).

Another interviewee noted:

Teachers' pedagogical knowledge is essential at all levels of education around the world, as it goes beyond achievements, academic-wise and makes students active discussants and informants in their different communities (Teacher 4).

This suggests that PCK plays a significant role in teaching and learning. This finding in line with Shulman argues that effective teaching is, "the presentation and design of materials in such a way that others can understand, ...understand what makes learning certain subjects easy or difficult; the ideas and biases that students of different ages and backgrounds bring to the learning of ideas and prejudices that students of different ages and backgrounds bring to the topics and lessons most often taught, which demonstrates that teachers have a deep understanding of how to communicate the material to learners [16]". Teachers' knowledge and training are important determinants in their capability to implement curriculum reforms, and conclude that teachers with low content knowledge may mislead students and use inappropriate materials and methods [11].

In addition, it was noted that 'PCK was used as a framework for defining professional knowledge' (M=4.54, SD=0.68), indicating that respondents felt that PCK was used as a basis to describe competent teaching awareness. In support of this statement, one respondent made the following comments:

Teaching goes beyond getting good grades for admission to prestigious institutions, although this is the main objective of the Ghanaian programme. Teaching must have an impact on the lives of the learners, and teachers with content pedagogical knowledge (PCK) achieve this with the students, so that they are qualified as professionals and do not only focus on the academic achievements of the learners, but teach the learners how to cope with situations later in life.

Another teacher supported her:

A teacher with pedagogical knowledge is considered a professional in this field, as he/she is able to impart knowledge to students that builds on their life experiences and improves their academic performance.

These statements clearly indicate that teachers with teaching expertise (PCK) are defined as professionals because they can motivate learners and improve their academic performance. This finding confirms the earlier assertion that PCK refers to a teacher's ability to translate content into a pedagogically effective form while taking into account the different abilities and backgrounds of students in their learning experiences [9]. Similarly, another study on how structural differences in teacher education programmes affect the development of PCK, found that PCK was used as a framework for defining professional pedagogical knowledge [32].

Also, a response rate of (M = 4.50, SD = 0, 54) was found for the statement 'PCK is an extraordinary knowledge necessary to translate the knowledge required for different types of Social Studies teaching'. Meaning that respondents strongly agreed that PCK is a salient knowledge that is desirable for translating the different types of knowledge required for teaching the subject. This was confirmed by the statement of one respondent in the interview:

"Teachers' Pedagogical Content Knowledge (PCK) is very important in eliminating students' misconceptions in the classroom, so it is able to change the misconceptions that some students have before the lesson. This is what makes Pedagogical Content Knowledge (PCK) something very special when it comes to imparting knowledge to students".

Another also gave his support:

"If a teacher has pedagogical expertise, he or she is likely to integrate what he or she has learned into teaching to make it interesting and to encourage the active participation of learners".

These statements suggest that teachers' PCK plays a significant role as it enables teachers to reflect on teaching or life situations they have experienced and incorporate them into the classroom to eliminate misunderstandings among students. This makes learning interesting. The data also showed that teachers' content knowledge (PCK) changed over time as they became more aware of students' needs" (M=4.48, SD=0.68), suggesting that teachers' content knowledge (PCK) changed over time as they become more aware of students' needs. The interview supported this claim when one respondent stated that:

As a proverb says that practice leads to perfection, teachers' pedagogical knowledge does not develop suddenly, but through a gradual process, as teachers encounter students who differ in culture, religion, tribe, gender, etc.

Another also gave his support:

"A teacher's Pedagogical Content Knowledge (PCK) cannot be developed all at once, but is rather a gradual process. Just as the students, we as teachers are confronted with challenges which differ from each other in terms of ability. This requires teachers to broaden their pedagogical knowledge (PCK), as one cannot, for example, use the same methodology to teach gifted and low-achieving students and expect them to understand the teaching in a relevant way".

These responses suggest that teachers' PCK evolve with the quality of the students they encounter. A similar study concluded that teachers' pedagogical knowledge bases are not fixed [33]. Research and professional collaboration generate new knowledge, which must be accessed, processed, evaluated, and modified into practical knowledge. It is expected of teachers as professionals that they will process and evaluate new knowledge that is pertinent to their professional practice and that they will regularly update their professional knowledge base. Hargreaves suggests that a prerequisite for teachers' re-professionalisation is that they employ a thorough knowledge base that promotes their professionalism by critically evaluating the science that supports effective teaching before applying it to practice. A similar study also found that teachers' curriculum content knowledge (PCK) developed over time as they became more aware of the needs of their students [34].

Finally, the statement, 'in-depth knowledge of content is essential for the development of a complete PCK was made by (M=4.48, SD=0.68) respondents who strongly supported the view that in-depth knowledge of content is essential for the development of a complete CPC. When one respondent said this, the interview data supported this statement:

"The way Pedagogical Content Knowledge (PCK) develops in teachers requires them to have rich content knowledge (CK), which means that without content knowledge (CK), there is nothing left for the teacher to build on, since content is what the teacher will teach. For example, if a JHS teacher has no content knowledge (CK) in Social Studies, but is familiar with pedagogy in another subject, how can that colleague teach? Nevertheless, content knowledge (CK) in each subject is a prerequisite for the individual to build pedagogical knowledge (PCK)".

Another interviewee added:

A teacher cannot develop better pedagogical knowledge (PCK) in a subject if he or she does not have thorough content knowledge (CK) in that subject. When a person has content knowledge (CK), he or she decides how to pass knowledge gained on to others. In summary, content knowledge (CK) is necessary for the construction of effective Pedagogical Content Knowledge (PCK) among teachers.

These suggest that if teachers are to have a broad pedagogical knowledge (PCK) of their subject area, they must have a deep content knowledge (CK). In summary, central to PCK concept is the notion that 'in-depth content knowledge' is necessary for effective teaching and learning, rather than being self-evident, and that it has a significant impact on teaching and student learning and serves as a framework for definition. Professional knowledge used in teaching also provides the unique knowledge needed to translate the various types of knowledge required for teaching Social Studies and to develop over time as students' needs become better understood, as well as to develop a comprehensive pedagogical content knowledge (PCK).

## 4. Conclusions

Teachers' knowledge of curriculum content is important for classroom teaching because it enables them to select appropriate TLMS and curriculum strategies in satisfying the needs of learners, to enable learners to reflect critically, to close the gap between theory and practice, to connect theory and practice and to encourage students and teachers to engage with all potential claims. Because content knowledge enables future teachers to shape their cognitive frameworks, it is a prerequisite for the development of pedagogical content knowledge.

# 5. Recommendations

- 1. The Ghana Education Service (GES) should conduct regular in-service training for teachers to increase their pedagogical knowledge and enable them to select appropriate MLT and teaching methods to enhance the learning of both teachers and students.
- 2. Social Studies teachers should continue to develop their content knowledge as this will influence how teachers communicate concepts to students at all levels of education.
- 3. Social Studies teachers should emphasise a student-centred approach to teaching in order to dispel students' misconceptions and enable them to perform well academically.

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