Exploring Teachers' Perspectives on the Availability of Professional Development Programs: A Case of One District in Ghana

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Abstract

This qualitative research explored the perspectives of senior high school teachers on the availability of continuing professional development programs in the Sekyere East district in the Ashanti region of Ghana. Open-ended survey responses were used to explore respondents' views. Thirty-two teachers from five senior high schools in the district participated in the study. Categories and themes that emerged from the data analyses indicated that teachers in the district have opportunities to access distance learning facilities and graduate courses from institutions of higher learning. In addition, professional learning programs for teachers in the district take the form of workshops, in-service training, conferences, and seminars. However, the study found that these models were structurally traditional, rarely organized, and limited to few teachers in the district, making them less effective in impacting the quality of teachers' instructional practices and students' learning outcomes. Recommendations for policy direction and future research have been discussed.

Keywords: Professional development programs, Teacher quality, Pre-service, In-service, Trained teacher.

Introduction

Increasing opportunities for teacher continuous learning constitutes an important measure to impact the quality of classroom instructions and students' learning. Teaching as a profession connotes a life-long process of learning that is grounded in an ongoing training, experience, and practice (Fredriksson, 2004; Ball & Cohen, 1999). As Borko, Liston, and White comb (2009) point out, "...teaching is a complex intellectual and emotional task and learning to teach well is a developmental process that unfolds overtime when teachers have appropriate support and opportunities to learn" (p. 207) Instructional implications, based on such observation, draw attention to the fact that regardless of the quality of training teacher trainees receive during pre-service preparation, they might still feel inadequate at any entry level. As such, sustaining the life-time professional practice of teachers requires ongoing professional learning opportunities that support teacher continuing development and growth.

In Ghana, various reports and policy recommendations (e.g., Anamuah-Mensah, 2002; Educational Review Committee Report, 2002; Adamu-Issah et al., 2007; Ministry of Education, 2010; Ministry of Education & Ghana Education Service, 2012) have suggested a need for establishing policy framework to guide the implementation of professional development programs for teachers, especially at the pre-tertiary level. Pre-tertiary teachers in Ghana enter teaching profession through different routes. On one hand, there are teachers who have received training and supposedly have acquired the requisite competence and credentials to teach (trained teachers). On the other hand, there are those who have not received such initial institutional training experience (untrained teachers). This situation creates conditions necessary for the establishment of professional learning programs to provide opportunities for upgrading the professional knowledge and credentials of untrained teachers, offer advanced learning opportunities for trained teachers, and also offer short-term training in content and pedagogy (Mulkeen, et al., 2005). The current professional learning environment in the country allows both trained and untrained teachers to access institutional training models and other open and distance learning opportunities to upgrade their knowledge and acquire the requisite pedagogical skills (Cobbold, Ghartey, Mensah, & Ocansey, 2009). However, and especially for trained teachers who are not able to access these professional learning facilities, their professional learning ends after the completion of the initial training program. Like teachers everywhere, teachers in Ghana need continuing support through professional learning programs to help them access current information, knowledge, and skills. It is documented in the literature that positive relationships exist among teacher professional development, teaching quality, and the academic achievement of students (Killion, 2002; Yoon et al., 2007).

The Education Act of 2008 underscored the importance of the establishment of the National Teaching Council (NTC) to provide standards to guide professional development programs for pre-tertiary teachers (Ministry of Education, 2010). However, no known study, if any, has examined the extent to which professional development programs are driving pre-tertiary teacher improvement and quality practices in Ghanaian schools. The study explored the perspectives of senior high school teachers in the Sekyere-East district in the Ashanti region of Ghana on the availability of continuing professional development programs and how findings from the study might inform education policy within the district.

Teacher Education and Professional Development

Teaching is a professional journey that strives on continuous learning and support system. Along this professional trajectory, teachers transition from novices to experts. According to Robinson and Latchman (2003), teachers go through five interactive phases of professional development; Novice, Advanced beginner, Competent performer, Proficient performer, and Expert teacher. Transitions across these phases are marked by some challenges that tend to affect teacher retention and attrition (Boyd et al., 2008). To make this journey rather a learnable experience for teachers, practitioners and educators place value on effective programs, both at the pre-service and in-service phases of this professional trajectory (Robinson & Latchman, 2003).

A growing perspective on the evaluation of effective teaching is shifting attention towards teacher quality and its effects on students' learning (Blanton, Sindelar, & Correa, 2006). This shift is also influencing the quality of teacher preparation programs and certification processes (Rice, 2003). Teacher education programs are expected to shape the beliefs and perspectives of pre-service teachers in a way that supports teacher professional growth and impacts the quality of classroom instructions (Sikora & Alexander, 2004). Teacher education programs are designed to provide the initial training needed by pre-service teachers to develop the requisite knowledge, skills, and values to earn the appropriate and the required professional credentials to become effective teachers (Guskey, 2003). However, such programs only provide the first step in the professional development of teachers. Given the growing complexities in many classrooms today, it is unrealistic to expect teacher education to adequately prepare all teachers for every situation they encounter in their teaching experience (Lindberg & Olofsson, 2010). As such, there is the need to increase professional learning opportunities to help teachers refine their abilities to apply theoretical and pedagogical knowledge in their actual classroom work and practices (Feiman-Nemser, 2001).

Professional development is an ongoing sustainable process of professional learning that allows for collaboration and the sharing of professional knowledge, based on current research to inform the daily work of teachers (Lindstrom & Speck, 2004; Elmore, 2002). Research has shown that significant improvement in teachers' instructional practices can take place as a result of teachers' active participation in professional learning programs (Archibald, Coggshall, Croft, & Goe, 2011; Yoon et al., 2007). However, for such programs to create the changes necessary for continuous improvement of teachers' practices and students' achievements (Lindstrom & Speck, 2004), they should be intensive, ongoing, and connected to practice (Darling-Hammond et al., 2009). In extension, high-quality professional development program should create opportunities for collective and active teacher learning (Birman, Desimone, Porter, & Garet, 2000), where teachers have the opportunity to observe and be observed while teaching and planning classroom activities (Garet et al., 2001). Effective professional learning activities focus on encouraging continuing professional dialogue among teachers and allow for the integration of experiences that are consistent with best practices (Sikora & Alexander, 2004).

Effects of Professional Development (PD) on Teaching and Learning

A growing body of research indicates that access to CPD has positive influence on teachers' knowledge, skills, and instructional practice, as well as students' achievement (Holland, 2005; McCutchen et al., 2002; McLaughlin & Talbert, 2006; National Mathematics Advisory Panel; 2008; Mundry & Stiles, 2009). Professional development is regarded as an important approach to deepen the content knowledge of teachers and develop their capabilities to teach effectively (Birman et al., 2000). According to McLaughlin and Talbert (2006), PD provides continuous opportunities for teachers to renew their knowledge and skills through the training they receive and teachers' own reflections on the changes that they make to curriculum. Yoon and colleagues in 2007 reported that teacher professional development has significant impact on students' learning outcomes in three ways: First, teachers' knowledge and skills are improved; second, teachers develop effective knowledge and skills, which subsequently enhance their teaching, and; third, effective teaching leads to better students' learning outcomes.

Two implications can be drawn here; first, PD should be informed by students' learning needs (Darling-Hammond et al., 2009; Carpenter, Blanton, Cobb, Franke, Kaput, & McClain, 2004). Second, PD should transform the pedagogical strategies of teachers, both in curriculum and content (Holly, 2005; McCutchen et al., 2002). In sum, PD has the potential to help teachers develop effective instructional strategies to enhance students' learning (McCutchen et al., 2002). However, to obtain optimum effect of PD on students' learning, its framework has to be consistent with the curriculum materials that teachers use, the assessment, and the accountability measures that guide student success (Holly, 2005).

Professional Learning Opportunities for Teachers in Ghana

The need to examine policies and contexts that support the implementation of effective professional learning opportunities for teachers is becoming a growing concern in Ghana, after many years of neglect. Reports and studies in the past (e.g., Anamuah-Mensah, n.d; Acheampong, 2003; Kadingdi, n.d; Agbeko, 2007) have shown institutional inadequacies in the trajectory of teacher growth and development. However, there seems to be a growing attention towards teacher professional growth and development efforts in the country's education policy frameworks (Agbeko, 2007). Currently, there are a number of changes occurring in the ways that the education system is responding to current needs of teacher education in the country. These changes are also shaping teacher education to move away from being a single event that happens at the beginning of a teaching practice. With such changes taking place in the teacher development landscape, the country's teacher education programs are expected to provide teacher trainees with the requisite competencies to support and reinforce quality classroom instructions in their life-long career development (Agbeko, 2007). The University of Cape Coast and the University of Education, Winneba remain the two major public institutions of higher learning that are offering bachelor's and master's degree programs in education for educators and teachers at both the basic and the high school levels (Asare & Nti, 2014). These institutions provide opportunities for teachers to receive institutional training to upgrade their knowledge (Cobbold, Ghartey, Mensah, & Ocansey, 2009). However, because access to such programs by teachers is constrained by infrastructural limitations and quota system applied to study leave policy, distance education and sandwich programs have increasingly become avenues for teachers to upgrade their knowledge and skills (Baiden-Amissah, 2006).

The ongoing educational reforms are expected to inform the professional learning activities or in-service training programs for teachers, especially after initial training. Using ongoing professional learning programs to shape teacher beliefs, attitudes, and dispositions in the Ghanaian pre-tertiary classroom has been lacking for years (Kadingdi, n.d.; Ameyaw-Ekumfi, 2001). Previous reports have indicated the absence of well-defined standards for teacher development and the lack of consistent professional development programs as critical aspects of teacher development after the initial training (Agbeko, 2007; Ameyaw-Ekumfi, 2001; Kadingdi, n.d.). Professional learning activities organized by Ministries of Education, the Ghana Education Service, and other funding agencies have taken the form of the cascade model of in-service training where head teachers and circuit supervisors are given training, and are expected to give the same training to local districts and schools (Acheampong, 2004; Kadingdi, n.d.). At best, these programs have become important measures to "...retrain and re-skill teachers in curriculum areas which they might have never studied in depth during their initial teacher training programs" (Kadingdi, p.14). With the country's educational reform initiatives consistently stressing the need for continuous teacher learning programs, current policies are beginning to focus on the institutionalization of continuous professional development schemes to provide professional support for pre-tertiary teachers. For instance, the Education Act of 2008 mandates the National Teaching Council (NTC) to provide standards to regulate the process of professional development, registration, and licensing of teachers in the country (Ministry of Education, 2010). While this is a major step in the history of teacher development in the country to regulate teacher accountability and professional ethics, these professional standards are yet to be reinforced.

The Current Study

Quality pre-service and in-service programs remain critical in efforts to use teacher improvement to promote quality classroom instructions and improvement in students' learning outcomes. However, ongoing professional development programs for teachers in Ghana are beset with several structural challenges. These inadequacies not only undermine teacher improvement efforts, but are also affecting national educational agenda of ensuring that every classroom in Ghana has the most qualified teacher.

As students' learning needs and outcomes become important factors in the determination of the quality of teacher professional learning programs and standards (Darling-Hammond et al., 2009), it is critical to focus attention on the high school education in the country, which is critical in laying the foundations for students' higher education aspirations and professional pursuits. The higher education and career prospects of students in Ghana greatly depend on students' performance in the final West African Senior Secondary School Certificate (WASSCE) examinations which students write at the end of their program. However, over the years, consistent reports on the WASSCE results have shown that many high school students fail to obtain the required passes in the core and other elective subjects (Country Module, 2013). While it is imperative to pay attention to evaluating the curriculum that students are learning, it is more critical to examine the kinds of professional learning opportunities accessible by high school teachers in the country and how such programs impact and improve students' outcomes. Notwithstanding, a review of literature shows limited discourses and empirical studies on professional development programs for teachers in the pre-tertiary level in Ghana. The import of the current gap in the literature informed the scope of the current study.

Method

Purpose and Research Questions

The purpose of this research was to explore the perspectives of senior high school teachers in the Sekyere East district in the Ashanti region of Ghana on the availability of continuing professional development programs. The concept of professional development in this study referred to all forms of ongoing teacher learning activities that were connected to the everyday practices of teaching and learning, including the construction of strong working relationships among teachers (Darling-Hammond et al., 2009). The following research questions guided the study:

- 1. What professional development programs are organized for teachers in the district?
- 2. How often are teachers in the district able to access professional learning opportunities?
- 3. How do teachers in the district benefit from the available models of professional development programs?
- 4. What do teachers in the district find challenging in accessing professional development programs?

Study Site and Participants

The study was carried out in the Sekyere East district which is located in the North-eastern part of the Ashanti region. Education in the district is considered an important means of improving the socioeconomic gains of the communities and families within the area. Therefore, improving the literacy rate and ensuring equity in access to education are among the priority areas of the district. The district has about 108 pre-schools, 129 primary schools, sixty-five (65) junior high schools, and five senior high schools (http://www.ghanadistricts.gov.gh). The study participants were a cross section of thirty-two (32) senior high school teachers who taught different subjects in the five senior high schools within the district. Participants voluntarily participated in the study after they had initially consented. Of the thirty-two (32) respondents, eighteen (18) held relevant academic degrees and training as expected of professional teachers in Ghana. Even though 11 respondents held academic degrees in Bachelor of Arts and Bachelor of Sciences, they had not received the required training in education to make them qualify as professional teachers. Three respondents held master's degree which is not a requirement, but the highest degree a senior high school teacher could have. While some teachers in the district held membership in the various subject associations, others did not belong to any subject-based associations. The two major professional associations respondents owed their membership to were the Ghana National Association of Teachers (GNAT) and the National Association of Graduate Teachers (NAGRAT). Table 1 provides a summary of the respondents' background information.

Table 1: Description of Respondents

Characteristics	Frequency (N= 32)
B. A.	6
B. Sc.	5
B. Ed.	18
HND	-
Masters	3
Number of Years Taught	
1-5	7
6-10	7
11-15	6
16-20	5
21-above	7
Membership of Subject Associations	
Yes	22
No	10
Membership of Teacher Associations	
Ghana National Association of Teachers (GNAT)	19
National Association of Graduate Teachers (NAGRAT)	13

Data Collection

Open-ended, as well as closed-ended survey responses were used to collect data from teacher respondents. While the closed-ended items were used to solicit information on participants' background, the open ended questionnaires were used to collect information on the perspectives of the respondents. The paper and pencil survey questionnaires were given to teacher respondents on a typical school day and they returned them the next school day. The items contained both shorter "free list" types of text and more "narrative" type where respondents provided relatively longer texts (Jackson & Trochim, 2002). The open-ended survey responses were considered appropriate because they provided a rich description of respondents' own perspectives (Jackson & Trochim, 2002; Roberts et al., 2014). In addition, the survey offered a greater anonymity to respondents which facilitated the process of generating more honest responses (Erickson & Kaplan, 2000).

Of the initial forty teachers who collected the survey, thirty-two returned the completed surveys.

Data Analysis

We used content analysis techniques to analyze the data (Jackson & Trochim, 2002; Namey, Guest, Thairu, & Johnson, 2008; Ryan & Bernard, 2000). All the responses were typed up and initial codes were generated, based on their contextual relevance. Individual codes were given frequency counts and were further categorized based on the number of times a particular code was applied to a category. With this process, frequency and saliency of particular words or phrases in the data were determined in order to identify keywords or repeated ideas (Namey et al., 2008). The emergent categories represented the prevalence of the thematic responses of all respondents based on the number of times ideas in words and phrases were repeated (Ryan & Bernard, 2000). We used descriptive analysis and statistics to represent the emergent categories. In addition, some direct quotations from respondents were included in the analysis to give prominence to a respondent's perspectives regarding a particular category. Content analysis techniques were well suited for analysis of the data because of its value for efficiency and reliability (Namey et al., 2008).

Limitations of the Study

While the study illuminates certain important perspectives of teachers on the availability of continuous professional development programs in this particular school district, it was not without limitations. First, the study was qualitative case study which only focused on one school district in Ghana. The transferability of the current findings is limited to the population of high school teachers in this particular district. Therefore, caution must be exercised in generalizing the findings to the entire high school teacher population in Ghana.

Notwithstanding, the current study identifies a consideration of a large scale quantitative investigation into the trajectory of teacher professional development. Second, exploring teachers' perspectives on the accessibility of professional development programs was considered a meaningful way of gaining insights into their professional experiences and what other structural elements might affect their development. However, a more balance in repondents' perspectives may have been obtained if officials at the Ministry of Education and Ghana Education Service were included in the study population. Future investigations may consider including such population to obtain comprehensive perspectives on the availability of professional development programs for teachers at the district level.

Findings

Teacher Access to Professional Learning Opportunities in the District

Findings for research questions I and II are presented with particular focus on the forms of professional development programs that were organized for teachers and how often such programs were accessed by teachers in the district. See Tables 2 and 3 for the summary of the findings on the models of professional development programs for teachers in the district and how frequent they were organized.

Table 2: Models of CPD and How Often Respondents Received them

CPD	Monthly	Twice a year	Yearly	Less than yearly	Never
Workshops			21	2	7
In-service training		5	6	4	13
Conferences			10	1	13
Seminars		1	7	2	11
Distance Learning	1	1	1		20
Graduate courses			3	1	17
Other, specify					Once since I started teaching

Table 3: Table showing how often Respondents had Access to CPD Instructors

	Often	Sometimes	Never	
Teachers within my school	4	15	14	
Teachers outside my school	3	12	14	
Outside experts	7	9	15	
University faculty	3	7	17	
Experts from the government	2	12	15	

Note. Totals not equal to number of respondents. Respondents ticked more or less than five (5).

According to the teacher respondents, they seldom participated in workshops, in-service training, conferences, and seminars. While the study found limited opportunities for professional development programs, teachers shared views about opportunities for distance learning and further studies in graduate programs at the various universities. Distance learning and studies in advanced graduate program opportunities allowed teachers to take course, especially during vacations, to enable them gain the requisite academic proficiency and professional competency for teaching at the high school level. Teacher respondents shared that sponsorship schemes such as study-leave grants existed to help them enroll in full-time advanced studies at the nation's universities. However, because the scheme operates on a quota system, limited opportunities were offered to a few teachers. Respondents were asked to provide responses based on whether they had been accessing the selected continuing professional development models on monthly, twice a year, yearly, less than yearly, and never. We found that the direct involvement of the Ghana Education Service (GES) and other professional and subject associations in professional development activities for teachers was infrequent in the district. A respondent stated, "...it is only when new programs or reforms are being introduced that the GES designs programs to explain the objectives and implementation modalities to teachers."

Respondents indicated that they met at both the school and at the departmental level once at the beginning of every term, while few said they met on monthly bases. According to respondents, they met to discuss curriculum, subject allocations, resolve problems, and plan activities for the term.

Usefulness of Professional Development Programs for Teachers

While some respondents noted that professional development programs they participated in had effect on the way they used teaching and learning materials, others indicated that they did not. A respondent indicated "the workshop that I participated in had an impact on my teaching. I used teaching aids in my lessons and they helped my students to understand better and made my lesson practical..." Other respondents also indicated that professional development programs that they received helped them acquire new knowledge, ideas, and skills in their subject areas, which they believed changed their understandings of new developments and their work ethics. Some indicated how such programs were translated into guiding students' learning to answer examination questions, reflections on what is taught, and strategies for effective learning. A teacher respondent wrote, "I attended workshops, and I was able to guide my students on the correct ways of answering WASSCE questions to score major points." Other respondents perceived that there had not been any significant change in their teaching because they did not have the materials to work with in their classrooms. A teacher respondent wrote "...an ICT in-service training for instance, equipped me with knowledge of how to use projector in teaching some aspects of my teaching areas such as comprehension, summary, poetry etc. However, due to inadequate number of projectors, I am yet to use this in my class. Notwithstanding, this is bound to change my teaching". It is also worth noting that, of the thirty-two (32) respondents, ten (10) indicated that they had no access to any professional development programs and so their teaching methods had not changed.

Teacher Challenges in Accessing Professional Development Programs in the District

Categories that emerged from responses that related to respondents' perspectives on the challenges of accessing continuing professional development related to limited funds and limited opportunities for continuing professional development. A teacher stated, "...continuing professional development does not feature in the calendar of educational authorities in my district due to inadequate funding." Another teacher indicated "lack of availability of adequate funding by the government is an obstacle to the provision of continuing professional development." In addition, respondents indicated that their participation in professional development courses were limited because their schools lacked the resources to sponsor them. A respondent indicated, "when such programs are organized, a maximum of two teachers are requested to participate on behalf of the school, leaving the mass behind." Another teacher wrote, "...if you are about six teachers teaching a particular subject, all of you cannot attend the program due to lack of funds. The headmistress sponsors, at most, two teachers to attend such an important program." Additional challenges respondents discussed included lack of information, inadequate provision of materials, lack of personnel, delay in releasing allowance, and difficulty in obtaining study leave with pay for further studies.

Discussion

The current study explored the perspectives of senior high school teachers in the Sekyere East district of Ashanti region in Ghana on the availability of continuing professional development. This was to gain insights into teachers' perspectives and to offer an in-depth understanding on the kinds of professional development programs that existed for teachers in the district, the institutions that were involved in the organization of such programs, the rate at which such programs were organized for teachers, and how teachers found such programs useful. The underlying assumption of this study was that continuing teacher professional development is a critical component in efforts by educators and policy-makers to transform the instructional quality to improve high school students' achievement in the country. According to the findings of this study, the teachers in the district had opportunities to take distance learning and graduate courses from universities. In addition, workshops, in-service training, conferences, and seminars were the types of models of professional development programs that existed for teachers. However, not all respondents in the study reported to have had the opportunity to access such programs since joining the teaching profession. The few teachers who reported attending such programs also indicated that their participation was on yearly bases.

The findings suggest that while some forms of teacher professional development programs existed, such programs were not systematically organized and were also not professionally sanctioned for all teachers in the district.

These findings are consistent with an observation that teacher professional development programs in Ghana are only used as ad hoc and patchy measures "to retrain and re-skill teachers in curriculum areas which they might have never studied in depth during their initial teacher training programs." (Kadingdi, p.14)

According to the current study, not all teachers in the district had the requisite training and qualification as required of a professional teacher. In addition, individual teachers reported a wide range of teaching experience in terms of the number of years they had taught. These observations create conditions necessary for the continuing sharing of professional knowledge and training so as to allow teachers to self-evaluate and self-reflect on their own practices in the development of new pedagogies and strategies. Considering the public demands, expectations, and the worries about the number of senior high school graduates who are unable to advance their education beyond the high school level, opportunity for professional learning should not be limited to a few select teachers, but should be accessible to all teachers, including beginning and experienced teachers. As funding was mentioned as a major challenge limiting respondents' participation in continuing professional development, more efficient and cost effective models should be considered. For instance, the "Train-the-Trainer" model which seems to work well in high-achieving nations might be helpful in the Ghanaian context. The model brings about one or more lead teachers to attend a central workshop where they are trained in specific skills or programs, and on return they are expected to train their peers in their various schools on the skills learned (Pancucci, 2007). Even though the "Train-the-Trainer" model is not a new way of organizing professional development programs for pre-tertiary teachers in Ghana, its embedded strengths of cost-effectiveness and efficiency are yet to be fully explored. Thus, its efficiency can be improved to solve the professional development needs of teachers by preparing a small group of trainers and the materials and resources needed to deliver the program (Pancucci, 2007).

In part, the curricular that teachers study during their initial training programs and the opportunity for enrolling in distance and advanced courses at the graduate level help to fortify the foundations of their professional learning. However, given the growing complexities in many Ghanaian classrooms today, it is instructionally and professionally groundless to expect such programs to adequately prepare teachers for the challenging situations they encounter in their professional practice. There are many emerging challenges in the Ghanaian classrooms that need stakeholders' attention. Students appear deeply immersed in the saturated world of technology far more than their teachers do. Many Ghanaian teachers and educators still hold the view that the best way to manage students' behavior issues is through the administration of corporal punishment. The assessment tools employed in Ghanaian schools are increasingly becoming less dependable. Practically speaking, most classroom instructions in many Ghanaian schools still place the teacher at the center of the teaching and learning processes. These and other emerging issues should inform educators' understanding about the need to create increased opportunities for continuing professional development programs for teachers at both the national and district levels. Opportunities for teacher professional learning should be expanded beyond the traditional distance learning facilities and the graduate courses because for most teachers their decision to take such courses is motivated by status-improvement rather than as a way of improving their professional development and growth. Thus, degree-acquisition and status-upgrade are increasingly becoming prioritized over the accountability mechanisms involved in determining how a set of newly acquired content and pedagogical knowledge might be applied to impact students' learning outcomes. In addition, there has not been much empirical evidence to support the direct positive effect of knowledge and skills of graduate education on students' learning outcomes (Hill, 2007).

According to the study, the Ministry of Education (MOE), Ghana Education Service (GES), teacher associations, subject associations, and other non-governmental organizations are making efforts to implement programs to upgrade teachers' knowledge and skills in the district. However, such an annual or "one-shot" workshop limits opportunities for teacher participation and the amount and the quality of experience that is shared (Lewin & Stuart, 2003). While the workshops, conferences, and the seminars provide some short-term opportunities for teacher learning, growing evidence suggests that such traditional forms of professional development are less effective in providing teachers with sufficient time, practice, and content-based knowledge necessary to transform the quality of classroom instructions (Loucks-Horsley, Hewson, Love, & Stiles, 1998; Garet, Porter, Desimone, Birman, & Yoon, 2001). Such programs best appeal to "transmission models" where teachers are just provided with ideas, guidance, tips, and handout materials (Ball & Cohen, 999). According to the current study, teachers who had the chance to participate in such a less-than a day or one-time activity assumed a more passive role. This might limit their ability to apply the new set of knowledge and skills they acquire.

In addition, they might not feel competent enough to teach their peers who don't get the chance of attending such programs. In sum, the findings of the current study extend stakeholders' understanding on high school teachers' access to professional development opportunities and support mechanisms in the Sekyere East district in Ghana.

Teacher respondents in the current study expressed the view that the kinds of professional development programs they participated in were less effective in helping them advance their professional development and to improve their instructional practices. Thus, while some forms of professional development programs existed for teachers in the district, the mode, structure, regularity, the type of activity, and the focus of such programs were not significantly marked by the defining characteristics of high-quality professional development programs (Darling-Hammond, 1995; Garet, Porter, Desimone, Birman, & Yoon, 2001; Blank, de las Alas, & Smith, 2007; Darling-Hammond et al., 2009). Accordingly, no significant impact could be expected of such programs on the quality of teaching, assessment, and students' outcomes. Drawing on evidence from past research on the features of effective teacher professional development programs, we argue that professional development programs for teachers in the Sekvere-East district should include richer and varied opportunities where teachers become active learners, with an ample opportunity to apply new skills and knowledge (Casteel & Ballantyne, 2010). These may include non-traditional models such as study groups, mentoring, and coaching (Blank, de las Alas, & Smith, 2007) which can be tied with the day-to-day activities of teachers, making them sustainable overtime (Garet, Porter, Desimone, Birman, & Yoon, 2001). A consideration of such learner-based programs should be organized on established ongoing communication norms, trust, and collaboration to provide teachers with the opportunity to work together to achieve a common goal of improving their professional practice (Borko, 2004). Also, evidence suggests that professional development programs are more effective when participants actively engage the resources (Ingvarson, Meiers, & Beavis, 2005). Professional development programs for teachers in the district should focus on modeling best practices where teachers get the chance to observe exemplary lessons, conduct demonstration lessons, lead group discussions, and review student work with colleagues (Desimone et al., 2002; Garet et al., 2001). Such activities should be aligned with continuous follow-up and feedbacks (Archibald, Coggshall, Croft, & Goe, 2011). Beginning teachers should also be properly inducted to promote their long-term commitment to excellence in teaching.

Recommendations for Practice and Future Research

The kind of changes that are very important in any educational system are not necessarily the structural changes, but those that tend to build teacher capacity and professional culture (Ingvarson, Meiers, & Beavis, 2005). According to the findings of the current study and other large scale observations, teacher professional development in Sekyere-East district in particular and Ghana in general has not received the necessary policy attention. We recommend a policy framework to mandate the establishment of national requirements for professional development that would require teachers to complete a certain amount of professional development activities every few years. This framework should also specify certification and licensing requirements for pretertiary teachers in the country which has not been part of the culture of the teaching profession in Ghana. Also, stakeholders should consider investing the right amount of resources into the programs of teacher professional development at both the district and national levels to warrant the public expectations for improvement in students' learning outcomes. In addition, there has not been much research, particularly in the area of teacher professional development in Ghana. More empirical studies are needed to provide improved understanding on the state of professional development of pre-tertiary teachers in Ghana.

References

Acheampong, K. (2003). Teacher training in Ghana- Does it count? Multi-site teacher education research project (MUSTER). Retrieved from ageconsearch.umn.edu/bitstream/12867/1/es030496.pdf

Acheampong, K. (2004). Whole school development in Ghana. 2005 Education For All (EFA) monitoring report commissioned study.

Agbeko, J. K. (2007). Pre-service teacher training and its challenges: The current situation in Ghana. NUE Journal of International Education Cooperation, 2, 73-80.

Ameyaw-Ekumfi, C. (2001). Improving teachers' competence and their working conditions through reform of contents, curricula, methods, structures and means of teaching. Retrieved from http://www.ibe.unesco.org/International/ICE/ministers/Ghana.pdf

- Anamuah-Mensah, J. (2002). Keynote address on the 50th Anniversary Celebration of the Jasikan Training College. Ho: Ghana.
- Anamuah-Mensah, J. (n.d). The role of practicum in teacher education in Ghana. Retrieved from Jamensah.com/.../Practicum%20inTEACHER%20EDU%.doc.
- Archibald, S., Coggshall, J., Croft, A., & Goe, L. (2011). High-quality professional development for all teachers: Effectively allocating resources. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved from http://www.tqsource.org/publications/HighQualityProfessionalDevelopment.pdf
- Asare, B. K., & Nti, S. K. (2014). Teacher education in Ghana: A contemporary synopsis and matters arising. SAGE Open, 1-8.
- Baiden-Amissah, A. (2006). Improving the education sector in Ghana's development agenda. A paper presented at the Study Tour of Asia by African Ministers of Education, Accra Ghana. Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/2782001121703274255/1439264-1153425508901/Ghana_Issues_Paper.pdf.
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), Teaching as the learning profession: Handbook of policy and practice. San Francisco: Jossey-Bass.
- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. S. (2000). Designing professional development that works. Educational Leadership, 57 (8), 28-32.
- Blank, R. K., de las Alas, N., & Smith, C. (2007, February). Analysis of the quality of professional development programs for mathematics and science teachers: Findings from a cross-state study. Retrieved from Council of Chief State School Officers website: http://www.ccsso.org/content/pdfs/year%202%20new%20final%20NSF%20Impde%20all%2006%20%20Report%20-032307.pdf
- Blanton, L. P., Sindelar, P. T., & Correa, V. I. (2006). Models and measures of beginning teacher quality. The Journal of Special Education, 40(2), 115-127.
- Borko, H. (2004, November). Professional development and teacher learning: Mapping the terrain. Educational Researcher, 33(8), 3-15.
- Borko, H., Liston, D., & Whitecomb, J. (2009). Growing talents: Promising professional models and practices. The Journal of Policy, Practice, and Research in Teacher Education, 60(3).
- Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2008). Who leaves? Teacher attrition and student achievement. Calder Working Paper No. 23. Retrieved from http://www.urban.org/UploadedPDF/1001270_teacher_attrition.pdf
- Carpenter, T. P., Blanton, M. L., Cobb, P., Franke, M. L., Kaput, J., & McClain, K. (2004). Scaling up innovative practices in mathematics and science: Research report. Madison, WI: National Center for Improving Student Learning and Achievement
- Casteel, C. J., & Ballantyne, K. G. (2010). Professional development in action: Improving teaching for English learners. Washington, DC: National Clearinghouse for English Language Acquisition. Retrieved fromhttp://www.ncela.gwu.edu/files/uploads/3/PD in Action.pdf
- Chong, S., Wong, I., & Lang, Q. C. (n.d.). Pre-service teachers' beliefs, attitudes, and expectations: A review of the literature. Retrieved from http://conference.nie.edu.sg/paper/covert/ab00613.pdf
- Cobbold, C., Ghartey, A. J., Mensah, F., & Ocansey, F. (2009). Research on education in Africa with specific reference to Ghana. In Revitalizing higher education in Sub-Saharan Africa. A United Nations University project report. United Nations University. Retrieved from http://www.unu.edu/africa/files/UNU RevitalizingHigherEducation.pdf
- Country Module, Ghana (2013). Evaluation of foreign degrees and qualifications in the Netherlands. International Recognition Department Nuffic, The Hague. Retrieved from http://www.nuffic.nl/en/library/countrymodule-ghana.pdf
- Darling-Hammond, L. (1995). Changing conceptions of teaching and teacher development Teacher Education Quarterly, 22(4), 9-26.
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an area of reform. Phi Delta Kappan, 76 (8), 597-604.
- Darling-Hammond, L., & Sykes, G. (1999). Teaching as the learning profession: A handbook of policy and practice. San Francisco, CA: Jossey-Bass.

- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession: A status report on teacher development in the United States and abroad. Washington, DC: National Staff Development Council.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. Educational Evaluation and Policy Analysis, 24(2), 81–112.
- Educational Review Committee Report (2002). White paper on the report of the education review committee. Retrieved from http://www.modernghana.com/.../white%20paper%20and%20education%20reform.pdf
- Elmore, R. F. (2002, Jan-Feb). The Limits of Change. Harvard Education Letter. Retrieved from http://www.edletter.org/past/issues/2002-jf/limitsofchange.shtml.
- Erickson, P. I., & Kaplan, C. P. (2000). Maximizing qualitative responses about smoking in structured interviews. Qualitative Health Research, 10, 829-840.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. Teachers College Record, 103(6), 1013-1055.
- Fredriksson, U. (2004, September). Quality education: The key role of teachers. Education International Working Paper (No. 14). Brussels: Education International. Retrieved from http://www.ei-ie.org/statusofteachers/files(2004)%20Quality%20Education%20-%20The%20Key%20
- Adamu-Issah, M., Elden, L., Forson, M., & Schrofer, T. (2007). Achieving universal primary education in Ghana by 2015: A reality of a dream? New York, UNICEF. Retrieved from http://www.unicef.org/videoaudio/PDFs/Achieving Universal Primary Education inhana by 2015.pdf.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? The results from a national sample of teachers. American Educational Research Journal, 38 (4), 915-945.
- Guskey, T. R. (2003). What makes professional development effective? Phi Delta Kappan, 84(10), 748-750.
- Hill, H. C. (2007). Learning in the teaching workforce. The Future of Children, 17(1), 111-127.
- Holland, H. (2005). Teaching teachers: Professional development to improve student achievement. Research Points, 5(1), 1-4.
- Ingvarson, L., Meiers, M., & Beavis, A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practices, student outcomes and efficacy. Education Policy Analysis Archives, 13 (10), 1-20.
- Jackson, K. M., & Trochim, W. M. (2002). Concept mapping as an alternative approach for the analysis of openended survey responses. Organizational Research Methods, 5 (4), 307-336.
- Kadingdi, S. (n.d). Policy initiatives for change and innovation in basic education programs in
- Ghana. Retrieved from http://www.educatejournal.org/index.php?journal=educate
- KIllion, J. (2002). What works in the high school results-based staff development? Oxford, OH: National Staff Development Council.
- Leu, E., & Price-Rom, A. (n.d). Quality of education and teacher learning: A review of the literature. Retrieved from http://www.equip123.net/docs/E1-QualityEdLitReview.pdf
- Lewin, K. M., & Stuart, J. S. (2003, March). Researching teacher education: New perspectives on practice, performance and policy. Multi-site teacher education research project (MUSTER) synthesis report. Brighton: Department for International development (DFID). Retrieved from http://www.id21.org/edu.html
- Lindberg, J. O., & Olofsson, A. D. (Eds.) (2010). Online learning communities and teacher professional development: Methods for improved education delivery. Hershey, Pennsylvania: IGI Global.
- Lindstrom, P., & Speck, M. (2004). The principal as professional development leader. Thousand Oaks, CA: Corwin Press.
- Loucks-Horsley, S., Hewson, P. W., Love, N., & Stiles, K. E. (1998). Designing professional development for teachers of science and mathematics. Thousand Oaks, CA: Corwin Press.
- McCutchen, D., Abbott, R. D., Green, L. B., Beretvas, S. N., Cox, S., Potter, N. S., Quiroga, T., & Gray, A. L. (2002). Beginning literacy: Links among teacher knowledge, teacher practice, and student learning. Journal of Learning Disabilities, 35 (1), 69-86.
- McLaughlin, M. W., & Talbert, J. E. (2006). Building school-based learning communities: Professional strategies to improve student achievement. New York, NY: Teachers College Press.

- Ministry of Education (2010). Education Sector Performance Report. Retrieved from http://www.idpfoundation.org/Ghana%20MoE%20Ed%20Performance%20Report%202 10.pdf.
- Ministry of Education & Ghana Education Service (2012). Ghana Pre-tertiary teacher professional development and management in Ghana: Policy Framework. Retrieved from http://planipolis.iiep.unesco.org/upload/Ghana/Ghana_Pretertiary%20teacher%20professional%20development%20and%20management.pdf
- Mulkeen, A. D. Chapman, J. DeJaeghere, E. Leu, & Bryner. K. (2005). Recruiting, retaining, and retraining secondary school teachers and principals in Sub-Saharan Africa. GEC Working Paper Series. Washington D.C.: Academy for Education Development and the World Bank.
- Mundry, S., & Stiles, K. E. (2009). The promise of professional learning communities. In S
- Mundry and K. E. Stiles (2009). Professional learning communities for science teaching: Lessons from research and practice. Arlington, VA: National Science Teachers Association Press.
- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2008). Data reduction techniques for large data sets In G. Guest, K. M. MaCQueen (Eds.), Handbook for team-based qualitative research. Altamira Press: Lanham, MD, pp. 137–162.
- National Mathematics Advisory Panel (2008). Foundations for success: The final report of the national mathematics advisory panel. Washington, D. C.: U. S. Department of Education. Retrieved from http://www.ed.gov/about/bdscom/list/mathpanel/index.html.
- Pancucci, S. (2007). Train the trainer: The bricks in the learning community scaffold of professional development. Retrieved from http://www.isatt.org/ISATT.papers/ISATT.../Pancucci_TraintheTrainer.pdf
- Rice, J. K. (2003). Teacher quality: Understanding the effectiveness of teacher attributes. Washington, D. C.: Economic Policy Institute.
- Roberts, M. E., Stewart, B. M., Tingley, D., Lucas, C., Leder-Luis, J., Gadarian, S. K., Albertson, B., & Rand, D. G. (2014). Structural topic models for open-ended survey responses. American Journal of Political Science, 00 (0), 1–19.
- Robinson, B., & Latchman, C. (2003). Teacher education through open and distance learning. London: COL/Routledge-Falmer.
- Ryan, G., & Bernard, R. (2000). Data management and analysis methods. In N. Denzin & Y. Lincoln (Eds.), Handbook of Qualitative Research (pp. 769–802). Thousand Oaks, CA: Sage.
- Yoon, K. S., Duncan, T., Lee, S. W., Scarlos, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects students' achievement. Issues and Answers Report 33. Washington, D. C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/REL_2007.pdf