Exploring the Impact of Professional Development on Teaching and Learning from the Perspective of Teachers in Ghana

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Abstract:
This qualitative study explored teachers’ perceptions of the impact of Professional Development (PD) programmes on teaching and learning in four Ghanaian schools in the West Gonja district in the Savannah region. Data were gathered using document analysis and semi-structured interviews with twenty-eight (28) teachers from the four case study schools. The major findings that emerged from the data analyses were: 1) in-service PD is essential for the continuous upgrade of teachers to meet rising challenges of the profession because pre-service training cannot prepare them for such unforeseen challenges; 2) improper planning, content, timing and strong focus on student learning are the main factors found to affect PD programmes; and 3) the main challenges teachers face in relation to PD programmes are improper organisation and the inability of teachers to implement gained PD knowledge in the classroom. In general, the data had validated that, whether teachers are neophytes or experienced, PD is essential in sustaining the changes made to their teaching practice. This study provides insight on the impact of professional development in Ghana and could help in shaping policy and practice in the country, sub-region, other developing nations and beyond.

Keywords: Professional Development (PD), pre-service, in-service, impact, teaching and learning, perspective of teachers

1. Introduction
Pre-service training may equip teachers with the necessary tools for an effective professional career, but it, certainly, cannot prepare them for all the unforeseen challenges they may face throughout their careers. There is therefore the need to provide teachers with opportunities for in-service professional development (PD) in order to attain high standard of teaching and maintain a high-quality teacher workforce.

The main rationale for teacher education in Ghana is to equip and upgrade teachers’ knowledge and skills together with better incentives for the benefit of school children. This can be achieved through an efficient, accessible, integrated teacher education and training system that provides structures for continuous PD throughout the professional life of the teacher (Ministry of Education, 1993).

One of the models for continuous PD for teachers in Ghana is distance education. The main objective of the distance education programme policy document is to make quality education more accessible and relevant to meet the learning needs of Ghanaians at all levels (Ministry of Education, 1993). This document directs the delivery of distance education in Ghana. Camburn and Han (2015) posited that practically every country in the world had carried out one form of curriculum reform or another over the preceding two decades, yet there is inadequate support provided for teachers to update and upgrade their knowledge and skills to meet new challenges. It is thus important for teachers to undergo relevant PD training for continuous development in their knowledge and skills, in order to use the most appropriate strategies to maximize the understanding of their students.

For this objective to be achieved, the Ghana Education Service (GES) has a policy that aims at encouraging teachers to pursue further studies in tertiary institutions to acquire more knowledge and upgrade their skills. The GES policy on teacher PD states among others that, “Study leave with or without pay, may be granted to members of the service by the Council on the advice of the Director-General” (Conditions and Scheme of Service, 2000). Some private schools in Ghana also create an enabling environment for PD. Teachers have thus availed themselves of the opportunity to pursue studies to obtain diplomas and degrees in various fields of study and to upgrade their professional knowledge and practice. The concerns, however, centre on whether or not the various PD programmes do have any impact on students’ learning outcomes. The craving for a deeper insight into the conundrum necessitated this study.

2. Review of Relevant Literature
2.1. Theoretical / Conceptual Framework
The conceptual framework that relates to this study is constructivism, also referred to as social constructivism. Constructivism deals with how learning takes place and the active stages through which learners put their prior knowledge, both past and present, to use in order to create new information (Dewey, 1916; Piaget, 1973; Vygotsky, 1978).
This theory is relevant to continuous PD as it appreciates the importance of teacher reflection on new knowledge, formal or informal, and its implications for future practice (Boud, Keogh & Walker, 2013).

2.2. Meaning of PD

Teacher PD definitions differ according to educational traditions and contexts. In many educational systems, PD is described as a process that encompasses all activities that promote professional career growth (Rogan & Grayson, 2003).

Guskey (2000) describes PD programmes as a way to change the professional practices, beliefs and understanding of school teachers toward an articulated end; with the end being student learning. PD programmes should therefore bring about change in the classroom practices and beliefs of the teacher, thus resulting in added student learning.

The meaning of teacher PD is challenging for the main stakeholders in the educational world (Neil & Morgan, 2003), with many reciprocal terms used in the literature - staff development, lifelong learning and continuing PD (Crawford, 2009). Some consider them all to be the same, while others attribute different meanings to them depending on the paradigm they are coming from.

2.3. Impact of PD on Learning and Teaching

Powell, Terrell, Furey and Scott-Evans (2003) defined the word 'impact' as changes in PD, practices and effective response as perceived by the individual practitioner. They argued that measuring impact did not necessarily have to rely solely on quantifiable data. Instead, they proposed that the impact of PD on teaching practice could also be assessed from the teachers' insight and reflection of what constitute significance and value about their personal, academic and professional needs and development.

Desimone (2009) professes that PD also impacts on the teacher's ability to decide on and implement valued changes in teaching and leadership behaviours so that they can educate their students more effectively. Teachers' growing confidence can also be seen from their ability to clearly articulate personal views on educational matters (Powell et al., 2003).

Furthermore, teachers' PD is central to the successful implementation of any type of educational reform (Desimone, 2009). This claim is supported by Fullan (2007) who state that PD is very key to the success of any reform, provided it is linked to students' learning, school improvement and related policy and programme implementation.

Indeed, teacher PD does have major impact on students' learning outcomes in three ways: Firstly, knowledge and skills of teachers are improved; secondly, teachers tend to develop effective knowledge and skills, which ultimately enhance their teaching, and; thirdly, effective instruction leads to better students' learning outcomes (Yoon, Duncan, Lee, Scarlos & Shapley, 2007)

2.4. Factors Affecting PD

Conceptual, contextual and methodological factors to a greater extent contribute to a successful PD programme (Villegas-Reimers, 2003). While conceptual factors refer to how change, teaching, and teacher development are perceived, contextual factors relate to the role of the school leadership, organizational culture, external agencies and the extent of support given to a programme. The processes or procedures that have been designed to support teacher PD are the methodological factors.

Numerous research studies have found various factors affecting teacher PD. Identifying professional needs, developing school-based practices relevant to learners, teacher influence in planning, continuous support, collaboration with colleagues and multiple sources of evaluation are among the factors found to influence continuing PD of teachers (Rueda, 1998; Villegas-Reimers & Reimers, 2000; Randazzo-Martin, 2001).

Indeed, a teacher’s perception about PD is very important. Teacher PD involves change at various levels: practices and behaviours, beliefs, attitudes, skills and knowledge (Evans, 2010); all of which may impact on how and what teachers learn from PD experience. A teacher who perceives PD positively is eager to attain new knowledge, skills, attitudes, values, and dispositions. Within such dispositions there is pride, self-esteem, team spirit, commitment, drive, adventure, creativity and vision. All these attributes have to be owned by the teacher (Mosha, 2006).

Support in the following areas should be provided to make PD more effective:

- Reasonable time given to try acquired knowledge and time allowed for change in practice to occur (Miller, Smith & Tilstone, 1998).
- Provision of appropriate materials, resources, learning opportunities, and time away from teaching duties to attend courses (Northhouse, 2001).
- Provision of adequate long-term funding (Meththananda, 2001).
- Supportive learning environment which helps in professional growth (Miller, et al.,1998).

2.5. Research Questions

The purpose of this study was to investigate the impact of PD in Ghanaian schools by exploring the perspectives of both basic and secondary school teachers in the West Gonja district in the Savannah region. Through such investigations and explorations, one can gain a deeper understanding of the issues and provide solutions to them. The study was guided by the following research questions:

- What are teachers' perceptions of the impact of professional development on teaching and learning?
- What factors make professional development effective or otherwise?
What are the challenges in the district with regard to teachers’ professional development?

3. Research Methodology.

3.1. Data Collection and Analysis

A qualitative research approach was employed for the study. The study adopted the subjective approach to highlight the “subjective experience of individuals in the creation of the social world” (Cohen, Mansion & Morrison, 2007). This was because the study focused on understanding teachers’ perceptions, both emotional and intellectual, about the impact of PD on teaching and learning. Open-ended semi-structured interviews and document analysis were considered appropriate. A digital recorder was used in recording the interviews and later transcribed verbatim. The transcribed data were subjected to qualitative analysis through the process of coding, which made it possible for categories and themes to be derived from the actual data. Documentary analysis was opted for as it provides broad coverage of information on PD experienced by the teachers in the school investigated (Hall, 2009; Yin, 2003). So, documents related to school PD were also examined, which included Ministry of Education Survey of distance education in Ghana (2003); OECD (2009) (organisation for International Co-operation and Development) Teaching and learning International Survey; and Ghana Education Service (conditions and scheme of service, 2000).

3.2. Site and Population

West Gonja district in the newly created Savannah region of Ghana was the site of the study. Though predominantly a rural setting, education is highly valued in the district as it is considered a viable means of improving the socioeconomic status of the people in the area. The district has seventy-seven (77) kindergarten and nursery, thirty-three (33) primary schools, seventeen (17) Junior High Schools and only three (3) Senior High Schools (http://www.statsghana.gov.gh). The study participants were twenty-eight (28) teachers from two (2) senior high schools and two (2) junior high schools. All participated voluntarily and are professional teachers affiliated to one of the three professional teacher associations in Ghana: Ghana National Association of Teachers (GNAT); the National Association of Graduate Teachers (NAGRAT); and the Coalition of Concerned Teachers (CCT). The demographic information of the participants is summarised in Table 1.

| Teacher Research Code | Gender | Teaching Experience (Years) | Highest Qualification | Union Affiliation |
|-----------------------|--------|-----------------------------|-----------------------|------------------|
| **Senior High Case Study Schools** |
| TS1 | Female | 7 | Degree | NAGRAT |
| TS2 | Female | 7 | Degree | NAGRAT |
| TS3 | Male | 9 | Degree | GNAT |
| TS4 | Male | 6 | Masters | NAGRAT |
| TS5 | Female | 5 | Postgraduate Diploma | NAGRAT |
| TS6 | Male | 7 | Degree | CCT |
| TS7 | Male | 14 | Degree | GNAT |
| TS8 | Male | 2 | Degree | CCT |
| TS9 | Male | 2 | Degree | NAGRAT |
| TS10 | Female | 7 | Postgraduate Diploma | GNAT |
| TS11 | Female | 2 | Degree | NAGRAT |
| TS12 | Female | 4 | Degree | NAGRAT |
| TS13 | Female | 8 | Masters | NAGRAT |
| TS14 | Male | 11 | Degree | CCT |
| **Junior High Case Study Schools** |
| TJ1 | Female | 4 | Diploma | CCT |
| TJ2 | Male | 3 | Degree | GNAT |
| TJ3 | Female | 12 | Postgraduate Diploma | GNAT |
| TJ4 | Male | 3 | Degree | CCT |
| TJ5 | Female | 9 | Degree | NAGRAT |
| TJ6 | Male | 4 | Diploma | GNAT |
| TJ7 | Male | 6 | Degree | GNAT |
| TJ8 | Male | 2 | Degree | CCT |
| TJ9 | Male | 4 | Postgraduate Diploma | GNAT |
| TJ10 | Female | 5 | Diploma | GNAT |
| TJ11 | Female | 7 | Degree | NAGRAT |
| TJ12 | Male | 3 | Degree | GNAT |
| TJ13 | Female | 3 | Degree | GNAT |
| TJ14 | Male | 5 | Postgraduate Diploma | GNAT |

Table 1: Population and Code of the 28 Participants
4. Findings

The primary data collection tool was semi-structured interviews from four case study schools. Twenty-eight (28) teachers were interviewed within a period of four (4) months, July 2019 to October 2019. The data were analysed using the identified themes with relevant responses of the participants used to highlight the main findings.

4.1. Impact of PD Programs for Teachers

When the participants were asked how the knowledge and skills gained from PD had impacted their practice, the majority of the responses (N = 24/28 = 85.7%) were similar to the ones expressed below:

Teacher PD enables teachers to maximise their potential as teachers, to upgrade their knowledge to meet the changes in the technological world, and equips them with tools to serve pupils better by improving the standard of teaching. They also tend to gain confidence and self-esteem as they improve themselves (TS13). The training I received under the Early Grade Reading Assessment (EGRA) and the Early Grade Mathematics Assessment (EGMA) programmes have equipped me with the needed skills to improve pupils’ numeracy and literacy skills (TJ4). As a science teacher, the numerous workshops the GES has provided to science teachers have helped me to adopt new science teaching methods, leading to a drastic increase in the output of my students (TS9).

According to the responses, teachers’ knowledge and skills are upgraded through PD sessions, which contribute positively towards student learning.

The minority (N = 4/28 = 14.3%) however held the opinion that the haphazard nature of organizing PD programmes in the district tend to defeat its real purpose.

4.2. Models of PD Participants Had Received

All the participants have accessed at least one of the following models of PD:

- Workshops
- In-service training
- Conferences
- Seminars
- Distance Learning
- Graduate courses

While the majority of senior high school participants (N = 10/14 = 71.4%) have upgraded or are currently upgrading their professional and academic qualification through Distance Learning, only (N = 6/14 = 42.9%) of junior high school participants have upgraded or are currently upgrading through same model of PD.

4.3. Factors that Affect the Effectiveness of PD

When the participants were asked what factors affect the successful implementation of PD programmes and PD sessions, almost all (N = 24/28 = 89.3%) of the participants had views similar to the ones in the responses below:

As new teachers, it is commendable that we are given the opportunity to upgrade our knowledge through workshops and seminars. But improper planning of such PD programmes greatly affects their implementation (TS8). The rationale for PD programmes is good, but teachers are most of the time not consulted when PD programmes are designed. As a result, many of the PD programmes tend to be unsuitable to the needs of teachers. For me and many of my colleagues, PD programmes on effective student-centred teaching methods would be preferred, since they would be relevant to our needs in the classroom (TS1). The timing of some PD programmes is also problematic. Teachers are sometimes compelled to attend such programmes when classes are in session, thus making students lose precious learning hours during the teacher's absence (TJ5).

According to the responses, improper planning, content, timing and strong focus on student learning are among the factors that affect PD programmes and PD sessions.

4.4. Challenges for PD Provision

In relation to challenges the participants face concerning PD, the participants' were almost unanimous (N = 27/28 = 96.4%) with responses similar to the ones expressed below:

- PD programmes are mostly not well-organised as many workshops and seminars are characterized by lack of course materials, ineffective accommodation arrangement and inadequate feeding, which ultimately leave participants demoralised and disenchanted (TS11). We attend workshops and seminars to upgrade our professional knowledge and skills only to return to overcrowded classrooms with inadequate textbooks, making it practically impossible to put the skills and knowledge acquired to proper use (TJ10).

According to the participants, improper organisation of PD programmes and the inability to implement gained PD knowledge in the classroom due to overcrowding and inadequate reading materials are among the challenges faced by teachers in relation to PD.

5. Discussion

This research explored the perception of teachers in the West Gonja district of the impact of PD programmes on teaching and learning in four schools.

The analysis of the data regarding the first research question, what impact PD has on teaching and learning, shows that teachers PD has impacted positively on student learning. It supports findings by (Buczynski & Hansen, 2010; Harris,
Cale & Musson, 2011) that teachers’ PD experiences have helped them develop greater confidence with their practice. This also buttresses the assertion by (Hustler, McNamara, Jarvis, Londra & Campbell, 2003) that most teachers are satisfied with their PD experiences. The study also revealed that preschool teachers found the EGRA and EGMA programmes organized by GES, in conjunction with the United States Agency for International Development (USAID), to have impacted positively on their practice. The findings ultimately show that teachers need to experience PD as it has a positive impact on teaching practice.

For the second research question, what factors make PD effective or otherwise, data showed that improper planning, content and timing are among the factors that affect PD programmes and PD sessions. The literature provides support for (Archibald, Coggshall, Croft & Goe, 2011) who proffered that the isolation of teachers when the content of PD programmes are considered is the major obstacle to teachers’ professional growth. This is because the PD programmes are usually planned by Ministry of Education or school heads (Archibald et al., 2011). Consequently, only trainers identify solutions to problems, leaving no opportunities for teachers to analyse problems for themselves (Eraut, 1972). The study also corroborates the theory by (Guskey, 2000) that strong focus on student learning is one of the most significant factors that contribute to the effectiveness of any teachers’ PD. Also, poor planning and implementation of PD programmes affect the output of such programmes, thereby making it difficult for the intended objectives to be achieved.

Data for the third and final research question, what are the challenges in the district with regard to teacher professional development, illustrates that improper organisation of PD programmes and the inability to implement gained PD knowledge in the classroom due to overcrowding and inadequate reading materials are among the challenges faced by teachers in relation to PD. The findings are consistent with the proposition by (Lingam & Lingam, 2013) that availability of resources for learning and teaching is very crucial in the quest to provide more and better learning opportunities for children. The study also observed that though the Ministry of Education, GES and the various teacher unions are doing their best to ensure teachers upgrade their knowledge through various PD programmes, the perennial organisational challenges that characterize such programmes tend to defeat their real purpose.

6. Conclusion

This study has established three major findings. Firstly, in-service PD is essential for the continuous upgrade of teachers to meet rising challenges of the profession because pre-service training cannot prepare them for such unforeseen challenges. Secondly, improper planning, content, timing and strong focus on student learning are the main factors found to affect PD programmes. Thirdly, the main challenges teachers face in relation to PD programmes are improper organisation and the inability of teachers to implement gained PD knowledge in the classroom due to overcrowding and inadequate reading materials. In general, the data had validated that whether teachers are neophytes or experienced, PD is essential in sustaining the changes made to their teaching practice. However, much attention should be put in planning PD programmes to avoid implementational glitches. Also, teachers’ PD needs must be considered when planning PD activities. The study, though small in scale, has given useful insights on some potentially relevant information about PD in the West Gonja district of Ghana. The study involved four single case study schools in only one district, so more in-depth and large-scale empirical inquiries are required to generalise the findings. Future investigations may consider including leadership of the teacher unions, PD experts from academia, Ministry of Education officials and GES officials in the population; in order to gain comprehensive perspectives on PD programmes for teachers at the district level to help shape policy and practice.

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