

# **Influence of Social Studies Teachers Exposure to Post-qualification Professional Development on the Performance of Senior High School Students in Social Studies: A Case Study of Central Region of Ghana**

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## **Abstract**

The performance of Senior High School students in social studies in West African Secondary School Certificate Examination (WASSCE) has become a source of worry to stakeholders particularly parents in recent years. Social studies is a core subject that a candidate need to pass by (obtaining grades between A1-C6) before gaining admission into most post-secondary schools in Ghana. The study therefore concerned itself with the influence of Social Studies teachers' exposure to post-qualification professional development on the performance of Senior High School students in social studies in the Central region of Ghana. The purpose of the study was to find out if social studies teachers' exposure and non-exposure to post-qualification professional development had any influence on the performance of Senior High School students in social studies.

A descriptive survey design was used which involved 75 social studies teachers and 2,253 Senior High School 2 students in 25 schools across the Central region of Ghana as the population for the study. Two researcher designed instruments (Teacher Demographic Data and Variables Questionnaire (TDDVQ) and Performance Test in Social Studies (PTISS)) were used in data collection. Data was analysed with the aid of frequency counts and percentages and t-test statistical techniques. The results showed that students who were taught by teachers exposed to post-qualification professional development performed significantly better than students whose teachers were not exposed to any post-qualification professional development. Based on the finding and conclusion, it is therefore suggested that regular and relevant post-qualification professional development programmes should be organised for social studies teachers.

**Key Words:** Teacher, Post-qualification, influence, Students' Performance, Social Studies.

## **Introduction**

Research according to Harris and Sass (2008) has indicated that no single factor has ever accounted for the achievement of students' in school. For instance Koedel and Betts (2007) used a value-added gains model to look at students' achievement in elementary schools in San Diego and found that different teacher attributes contributed to students' performance. However, one other important factor that could influence the level of a student's performance in school is the level of exposure to post-qualification professional development by teachers. According to Loucks-Horsley, Hewson, Love and Stiles (1998) teachers' professional

development refer to the opportunities offered to practising teachers to develop new knowledge, skills, approaches and above all dispositions to improve their effectiveness in the classrooms.

Polk (2006) conceded that a major component of teaching was that of learning. Accordingly, when teaching is discussed learning follows. As a result, teachers are expected to teach, and students learn. In addition, teachers must also learn as the students do. Polk therefore stated that it was the teachers' responsibility to grow as practitioners, stay current in their fields, and continually evolve as professionals. She concluded that, it was this professional development that was considered paramount to successful teaching. In other words, it is the advancement /enhancement of teachers' knowledge of the students, the subject matter, teaching practices and education related legislation (Ogbonnaya, 2007). Professional development as a tool for improving teaching according to Polk is well established in research for instance Langer (2000), Bauer, Reese, and McAllister (2003), Marriage and Garmon (2003) and Trimble (2003) all carried out studies on teachers professional development.

In a study on teachers' personal variables and professional development on students' achievement Bambico (2010) found that professional development played a vital role in bringing innovative practices, and new knowledge to all educational personnel particularly teachers. Professional development according to Bambico, is an inevitable way of keeping teachers abreast with the knowledge and skills they need to continuously educate pupils with a wide spectrum of experiences, beliefs and abilities. In the field of education, new challenges emerge every now and then. Relying therefore on what one has learnt in school at a point becomes obsolete.

In Ghana, teachers are usually exposed to one form of post-qualification professional development or the other. Professional development usually involves formal and informal means of helping teachers to learn new skills and learn more innovative insights into pedagogy. Exposure to post-qualification professional development also make teachers look back at their own teaching practices and explore new or more advanced understanding of the content material of their subjects and use of teaching resources (GES, 2007). Professional development is also crucial for teachers of social studies because of the integrated nature of social studies which requires unique methods of teaching. Since social studies cover aspects of the social sciences with each aspect, requiring unique approach, regular exposure and participation in post-qualification professional development is not only important but also crucial. Teachers need to have extra skills to keep abreast with new developments to remain relevant in the classrooms. This can partially be met with regular exposure to post-qualification professional development

According to Hanushek and Rivkin (2010) and Rockoff and Speroni (2010) the need for lifelong development is evident because, change is constant, especially in volatile areas such as technology, and any improvement in the personal quality of the teacher would bring an improvement in students' performance. It is important to add that, the exposure to professional development referred to in this study exclude instruction and coaching teachers might have received whilst under training in their pre-service institutions. Professional development is used in the sense of receiving refresher courses after formal schooling with the purpose of sharpening the content and pedagogical knowledge base of the teacher after initial certification.

Several studies have indicated that certain types of professional development contributed to teacher quality and by extension students' achievement (Olson 2006; Mawhiney & Sagan 2007; Deubel, 2008; Goe & Stickler 2008, Jacob, Kane, Rockoff & Staiger, 2011). These studies indicated in different ways that a specific professional development programme that was sustained, aligned with the curriculum and focused on instruction was shown to positively influence school level achievement at both the elementary and high school levels. Langer (2000) found in a much earlier study that teachers of high-performing schools highly valued their participation in professional communities, be it personal communication with friends or colleagues or professional memberships in organizations.

Research according to Ebanks (2010) has indicated that teachers relationship with students influenced the tone of learning environment and students' success. Exposure to professional development could contribute to the ways teachers relate meaningfully and positively with students. Few studies have sought to determine what teachers learn or how they alter their pedagogies because of their exposure to professional development activities (Ross & Bruce, 2007). In another development, Penuel, Fishman, Yamaguchi and Gallagher (2007) examined the effects of different characteristics of professional development on teachers' knowledge and their ability to implement materials from an international earth-science education programme. They found a statistical significance with regard to teachers' positive perceptions about the coherence of their professional development experiences and their overall learning and programme implementation. With this positive perception, teachers were more likely to influence the performance of their students.

Teachers' participation in short workshops addressing an assortment of different topics in social studies produced significant attitudinal, perceptual, and behavioural changes to the benefit of pupils (Barton-Arwood, Morrow, Lane & Jolivet, 2005; Carpenter, Dublin, and Harper 2005; and Lewis & Lewis 2006). From the research findings of Mawhiney and Sagan (2007), knowing student needs helped teachers organise learner-centred instructions. Students' background

knowledge and demographic information influences the teacher's plan of instruction. The acquisition and use of such knowledge is enhanced when teachers engaged in professional development (Deubel, 2008).

In Ghana, there are professional development programmes for teachers. Unfortunately, these professional development programmes become more active when new educational programmes are introduced in the country. For instance, the 1987 and 2007 Education Reform Programmes saw a plethora of professional development programmes organised. These professional development programmes usually took the form of; workshops, seminars, symposia, exhibitions and so on organised across the length and breadth of the country. The purposes of these professional development were meant to sharpen and introduce news skills, content and pedagogical knowledge of teachers to enable them implement the new education programmes.

Ball, Lubienski and Mewborn (2001) reckoned teachers' professional development as intellectually superficial, disconnected from deep issues of curriculum and learning, fragmented and non-cumulative. Hsieh and Sun (2006) however concluded that, teachers who participated in professional development programmes influenced students' achievement by evaluating progress made in their teaching effort and planning for their instruction. Similarly, Milne and Plourde (2006) and Downer, Rimm-Kaufman, and Pianta (2007) in their studies stressed that a stimulating classroom environment and students' readiness could raise students' achievement and this could be done if teachers regularly participated in professional development programmes.

According to Mogari, Kriek, Stols and Ogbonnaya (2009) for some reasons, there have been concerns raised in some quarters about the effectiveness of teachers' professional development offered. Guskey and Yoon (2009) supported this, when they found that teachers ranked membership in professional organizations as not being important in their teaching. Teachers who appeared not to realise the benefits of professional development may be due to their irregular exposure to professional development. Fortunately, the techniques for benefitting from professional development could be learnt or enhanced through regular participation in staff professional development programmes (Ebanks, 2010).

The arguments about the ineffectiveness of professional development programmes for teachers appear to influence some education policy makers in Ghana. Although research findings from Ornstein and Levine (2006) suggested the relevance of professional development programmes, many social studies teachers hardly got the chance of updating their knowledge in content and pedagogy when they left formal training as teachers. The major reasons for not organising or exposing social studies teachers to frequent professional development in Ghana appear to be inadequate budgetary support from the Ministry of Education and the Ghana Education Service. The professional development programmes that are organised

hardly cover all subject areas. Although social studies is one of the core subjects at the SHS level, very little appear to be done in terms of organising professional development for teachers in social studies.

Notwithstanding the perceived weaknesses in professional development, Varella (2000) and Franke (2002) found from their studies that teachers' professional development had positive effects on students' achievement on condition it happened over a considerable period. They contended that what was important for a professional development to be effective was what it sought to achieve in schools. According to Polk (2006), research has showed that professional communities, associations, and membership in organizations provided another avenue for teacher development. Unfortunately, subject associations especially social studies apparently are not well organised in Ghana.

Schools according to Vang (2005) needed quality teachers to slow the teacher shortage and improve students' performance. The learning environment during teachers' exposure to professional development should contain enough materials to support self-awareness and self-directed learning. Invariably, teachers who do not take part in professional development may lack the knowledge in pedagogy suitable to direct students learning (Bostrom & Lassen, 2006). According to Fullan (2007), the term "professional learning" explained the duties of the teacher to students better than professional development since teachers should always be learning. In this way, the instructional needs of students' decide the professional development of the teacher (Ebanks, 2010).

It could be asserted that to some extent, the non-exposure of some teachers' particularly social studies teachers to regular and relevant professional development accounted for the fluctuating performance of students in West African Examinations Council's Examinations in Senior High School social studies. Allowing teachers to work with inadequate acceptable training posed a threat to teacher quality (Torff & Fuso, 2007). Professional workshops, college credit courses, and other training arrangements allow teachers to improve instructional skills (Ebanks, 2010). It is therefore suggested that teachers who had no access to organised professional development could watch experienced teachers teach as part of their professional learning.

It should be added that all other things being equal, teacher efficiency is tantamount to raising students' achievement. Teacher inefficiency result from lack of experience, inappropriate training, and incorrect teaching assignment. Increased inefficiency because of lack of professional development after initial training appeared to complicate a teacher's effort to gain competence (Ebanks, 2010). Zuzovsky (2009) asserted in a research that, conclusions in the literature on the relationship between teachers' participation in professional development activities and students' learning outcomes were mixed.

### Statement of Problem

The performance of SHS students in social studies in West African Senior Secondary Certificate Examinations (WASSCE) has become a source of worry to stakeholders particularly parents in Ghana. Social studies is one of the core subjects taught at the SHS in Ghana meant to accelerate the development of skilled human capital for national development. However; the performance of students over the past couple of years has showed a fluctuating trend. For instance, according to WAEC (2011), 17% (25,808), 24% (31,568), 39% (53,010), 22% (34,811) and 17% (26,056) of students in 2006, 2007, 2008, 2009 and 2011 respectively obtained grades outside A1-C6 in social studies. Teachers' level of exposure to post-qualification professional development is said to be one of the factors accounting for this trend. In spite of the concerns of stakeholders on the apparent fluctuating performance of students in social studies, no study appears to have been carried out on the influence of teacher exposure to post-qualification professional development on students' performance in SHS Social Studies in Ghana. It is against this background that, the current study was carried out.

### Purpose of Study

The purpose of the study was to find out if social studies teachers' exposure to post-qualification professional development had any influence on students' performance in social studies.

### Research Hypothesis

H<sub>0</sub>: No significant difference exists between the performance of Senior High School social studies students taught by teachers exposed to post-qualification professional development and teachers not exposed to post-qualification professional development in social studies.

### Significance of the Study

The findings of the study could be of relevance to parents / guardians of students in SHS as it would enlighten them on the influence of post-qualification professional development on the performance of SHS students in social studies.

### Methodology

A descriptive survey was used for the study. A descriptive survey enables a researcher to generalise the findings of a sample to the entire population (Sambo, 2008). The population was made up of 74,249 Senior High School (SHS) 2 students, 635 Social Studies teachers in the Central Region of Ghana. Multi-stage sampling technique which involved the use of simple random sampling, purposive sampling and proportional sampling were used to sample 75 Social studies teachers.

The teachers were needed for the study because they provided relevant data on the variables needed for the study. The 75 teachers were sampled through simple random through the lottery method. When a school was sampled and the number of social studies teachers was found to be more than the number of slots allocated to the school based on the students population, "YES" inscription was made on pieces of paper to tally with the number of teachers expected to be picked from the school with the excess teachers represented by "NO" inscription on pieces of paper. Social studies teachers who picked papers with the inscription "YES" were sampled. However, when it was found that no female teacher was sampled through the process some were purposively sampled because of the importance the gender variable in the study. The 2,253 SHS 2 students were sampled from the population of 74,249 from 17 Metropolitan, Municipal, and District Assemblies (MMDA'S) across the Central Region of Ghana. The procedure for the selection of the students involved the lottery method. When a school was sampled and number of students in a sampled school was greater than the allocated number of students, "YES" and "NO" where inscribed on pieces of paper. The number of "YES" was made to tally with the number of students to be sampled from a particular school. Students who picked papers with "NO" inscription were left out of the PTISS and those who picked "YES" were used for the study.

Two researcher-designed instruments tagged: "Teacher Demographic Data and Variables Questionnaire" (TDDVQ) and "Performance Test in Social Studies" (PTISS) were used in this study. The PTISS was made up of 50 past WAEC objective examinations items in social studies covering 2006-2009. The TDDVQ was used to collect teacher demographic data. The PTISS was used to test students who were taught by teachers exposed to post-qualification professional development and those not exposed to post-professional development. The TDDVQ collected information on teacher exposure and non-exposure to post-qualification professional development. This enabled the researcher to sort out students who teachers were not exposed and those exposed to post-qualification professional development and the PTISS administered to the two categories of students. The instruments (TDDVQ & PTISS) were pilot tested in the Western Region through the test-retest method after an interval of three weeks. The results were correlated using Pearson Product Moment Correlation Coefficient. The Correlation yielded a Reliability coefficient of 0.78 and 0.82 respectively hence the instruments were considered reliable enough for use. Social Studies experts were made to determine the content validity of the PTISS which were considered valid after the validation process. Frequency counts, percentages and t-test Statistical techniques were used in analysing the data.

### Results and Discussion

$H_0$ : No significant difference exists between the performance of Senior High School students taught by teachers exposed to professional development and teachers not exposed to professional development in social studies.

Table 1: Performance (grades) of Students Based Teachers Level of Exposure to post-qualification professional development

Grades/Scores	Exposed to Professional Development	Not Exposed to Professional Development	Total
F(39&below)	49 (5.28%)	55 (4.15%)	104 (100%)
D7-E8(49-40)	81 (8.72%)	112 (8.46%)	193 (100%)
C4-C6(59-50)	122 (13.13%)	267 (20.17%)	389 (100%)
A1-B3(70-60)	677 (72.87%)	890 (67.22%)	1567 (100%)
Total (100)	929 (41.23%)	1324 (58.77%)	2253 (100)

Table 1 reveals that students taught by teachers exposed to post-qualification professional development did better in terms of scoring A1-B3 and C4-C6 with 72.87% and 13.13% respectively. On the other hand, teachers not exposed to professional development students had lower failure percentages as 8.46% and 4.15% scored D7-E8 and F9 respectively, as compared to 8.72% and 5.28% scored by students taught by teachers who were exposed to post-qualification professional development. Further analysis can be found in table 2.

Table 2: The t-test Analysis Showing the Differences in the Performance of SHS Students' Based on Teacher Exposure and Non-Exposure to Post-Qualification Professional Development in Social Studies

Level of Exposure	N	Mean	SD	Df	Calc. t-value	Sig (2 tailed)	Decision
Exposed	929	68.2906	16.01	2251	5.661	.000	Rejected
Not Exposed	1324	64.7069	13.87				

$$p < 0.05$$

Table 2 indicates that the calculated t-value is 5.661 with p-value .000 which is less than the alpha level of 0.05. Since the p-value (.000) is less than the alpha level of 0.05, the hypothesis is rejected. Therefore, the alternate hypothesis is upheld. That, there is significant difference in the performance of SHS social studies students on the basis of teacher exposure and non exposure to professional development in social studies. This was in favour of students taught by teachers exposed to post-qualification professional development with a mean score of



68.2906, which is greater than the mean score of 64.7069 of that of students taught by teachers not exposed to professional development in social studies.

### **Discussion**

The frequency distribution of the grades of students taught by the two categories of teachers clearly showed that students who were taught by teachers exposed to professional development did relatively better than students taught by teachers not exposed to any post-qualification professional development. The findings support Varella (2000) and Franke (2002) that teachers' professional development had positive effects on students' achievement on condition it happened over a considerable period. The findings is also consistent with Bostrom and Lassen, (2006) who asserted that teachers who do not take part in professional development may lack the knowledge in pedagogy suitable to direct students learning. The finding is also consistent with Ebanks (2010) who agrees that professional workshops, college credit courses, and other training arrangements allow teachers to improve instructional skills. In the same way, the t-test analysis also confirms the frequency analysis of the students' performance as shown in the administered PTISS by way of the mean scores obtained by the two categories of students.

### **Conclusion**

Based on the findings of this study, the following conclusion is drawn:  
Notwithstanding the relatively low levels of exposure of teachers to post-qualification professional development programme, exposure to post-qualification professional development exerted significant influence on students' performance in an administered PTISS.

### **Recommendation**

Based on the findings, discussion and conclusion drawn from the study, the following recommendation is proposed to relevant educational authorities and other stakeholders:

The Ministry of Education of Ghana through the Ghana Education Service (GES) should organise regular post-qualification professional development programmes for social studies teachers, as it has been established from the study that, students taught by teachers who were exposed to post-qualification professional development performed better than students who were taught by teachers not exposed to any post-qualification professional development.

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