

TEACHER BELIEFS AND PRACTICES: EVIDENCE FROM UNTRAINED TEACHERS IN PUBLIC AND PRIVATE BASIC SCHOOLS IN MFANTSEMAN MUNICIPALITY OF GHANA

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Abstract

To gain a better understanding of untrained teachers' beliefs, and how that corresponds with their reported classroom practices, a survey was conducted with untrained teachers in public and private basic schools in Ghana. The study collected data through the survey design using a questionnaire which was administered to 188 untrained teachers in rural and urban basic schools. The data were analysed using Means and Standard Deviations to compare the teachers' beliefs and practices in the two school types. Pearson-Correlation was used to find out any relationship between the teachers' beliefs and their reported practices. Furthermore, Multivariate analysis of variance (MANOVA) was used to find out differences in beliefs, teaching practices and the school type. The results show that most of the untrained teachers held on to direct transmissive beliefs more than constructive beliefs. There were also inconsistencies in the relationship between beliefs and reported practices. However, there were statistically significant differences between the beliefs of untrained teachers in public and those in private schools about teaching and learning. Implication and recommendations for in-service teacher education programmes have been discussed.

Keywords: Untrained teachers; teacher beliefs; teaching practices; private and public; basic schools.

Introduction

Many developing countries have given more attention to quality education due to consistently poor students' achievements. This attention is tied with the Sustainable Development Goal 4 (SDG 4) which places a renewed commitment on quality education and urges countries' collective efforts towards its achievement by 2030. The SDG 4.1 states that countries should ensure that by 2030, 'all girls' and boys' complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes (UNESCO, 2016, p.20). Learning outcomes and what contributes to effective teaching is gaining increased attention globally as a result of the need to provide high quality education for all. Teaching and learning processes form a major component of the quality education discourse. Furthermore, efforts in many countries to increase access to basic education have been accompanied with attempts to improve education quality if students are to achieve meaningful learning outcomes. Research evidence shows that information about what teachers do in classrooms is vital in the understanding of students' learning outcomes. More importantly, teachers' beliefs about teaching and learning is an important psychological construct that informs researchers about the critical roles teachers play in the choice of teaching practices (Mede, 2017).

The issue of quality basic education provision has been associated with the quality of teachers. To avert learning challenges, children must have trained teachers who are motivated and can identify and support weak learners. This should be backed by a well-managed education system. The international literature recognizes teachers' classroom practices as the one most important ingredient in enhancing students' learning outcomes (Kyriakides & Creemers, 2008; UNESCO, 2016). It is also an established fact that teacher beliefs influence teaching practices in classrooms. Hence, the need for recruiting trained teachers with effective pedagogical skills in classrooms to enhance pupils' learning outcomes has been on the agenda of many education systems in developing countries. However, inadequate supply of trained teachers has compelled many developing countries including Sub-Saharan Africa (SSA) to employ untrained teachers to teach in schools especially in deprived areas (UNESCO, 2014).

In Ghana, concerns have been raised by stakeholders in education about the quality of education especially by low-cost private

schools in rural and peri-urban areas (Tooley, Dixon, & Amuah, 2007). This is as a result of the large proportion of untrained teachers in the private schools compared to their public schools. In 2015, the proportion of trained teachers in private schools was 18% compared with 84% in public primary schools. Therefore, there are more untrained teachers in the private schools than the public schools (MOE, 2013). However, these private schools continue to produce considerably better achievement results in national standardized examinations such as National Education Assessment (NEA) and Basic Education Certification Examination (BECE) compared to public schools. This poor performance of pupils in public schools compared to private schools has been a matter of concern among stakeholders in education about the quality of teaching in public schools (MOE, 2013).

Despite various initiatives of Government to upgrade untrained teachers to become professionals, there are still vast numbers of untrained teachers teaching in basic schools (MOE, 2013). These untrained teachers have beliefs which inform their teaching, and lead to higher or lower learning outcomes in different schools. The influence of teachers' beliefs on their teaching practices, and its corresponding effect on learning outcomes are issues that have been masked in the literature amidst low students' learning outcomes in Ghana. The comparison of the teaching practices of untrained teachers in private and public basic schools resulting from their beliefs has received very little research focus in the Ghanaian teacher education literature. Such a study is very important to inform policy and practice when it comes to teacher training in the wake of Ghana achieving the SDG 4. This study therefore fills the gap by comparing untrained teachers' beliefs and classroom practices in public and private basic schools in southern Ghana. The study was therefore guided by the following research questions:

1. what teacher beliefs and teaching practices do untrained teachers have about teaching and learning in basic schools in Ghana?
2. what is the relationship between teacher beliefs and teaching practices of untrained teachers?
3. is there any significant difference between public and private school teachers in teacher beliefs and teaching practices?

Teacher beliefs

Teacher beliefs, according to Kegan (1992), refers to ‘implicit assumptions about students, learning, classroom and the subject matter to be taught’ (p.66). There are rich research studies on teacher beliefs and how they affect classroom instructions. However, these studies have attempted to categorise teacher beliefs into traditional beliefs and constructivist teaching beliefs (Mede, 2017; Ramos-Marcuse & Arsenio, 2001; Rosenfeld & Rosenfeld, 2008). The literature search reveals a common dichotomy of teacher beliefs into beliefs about teacher-centred traditional and learner-centred constructivist beliefs. The Teaching and Learning International Survey (TALIS) in 2008 put these two ideological orientations of teachers into direct transmissive beliefs and constructivist beliefs which are similar to traditional/teacher-centred and learner-centered beliefs respectively (OECD, 2010). Proponents of the direct transmissive beliefs about teaching and learning hold the view that the teacher’s role is to communicate knowledge in a clear and structured manner to explain correct solutions, give solvable tasks while ensuring pupils’ concentration and calmness in class (OECD, 2010). This belief translates into the direct instruction teaching style, also known as whole-class teaching or active teaching where the teacher is actively involved in bringing the content of the lesson to pupils by teaching the whole class activity. Teachers with constructivist beliefs, however, hold the view that teachers give learners the opportunity to develop solutions to problems on their own, share ideas with peers and, reflect on concepts by allowing learners to play active role in the instructional process (OECD, 2010).

Teaching practices

Teaching practices have been a focus of much discourse on classroom studies regarding what constitutes effective teaching. Consequently, quality instruction has been found in the literature as being fundamental to students’ learning outcomes (Kyriakides & Creemers, 2008). Hence, teachers’ classroom practices such as assessment activities, student-teacher interactions and classroom organization have been found to have a direct effect on student learning. The TALIS study outlined three dimensions of instructional quality based on the TIMSS video study: structuring, student-oriented practices and enhanced activities. Structuring is a component of direct instruction

or whole-class teaching method and refers to practices such as starting the lesson with an overview or reviewing the lesson objectives, outlining the content to be taught, signalling transitions between lesson parts, and calling attention and reviewing main ideas in a lesson (Kyriakides & Creemers, 2008; OECD, 2010). Student orientation refers to series of related activities in the class that involve pupils or students working on exercises or tasks in groups or individually that challenge students to identify reasons why certain activities take place. Such activities include students working in groups to come up with a joint solution to a task, student self-evaluation and student classroom participation (OECD, 2010). Orientation practices are more in line with constructivist theories of teaching and learning (Kyriakides & Creemers, 2008). According to the TALIS survey (OECD, 2010), enhanced activities are activities in which teachers give students the opportunity to work on their own, such as projects that require at least one week to complete, making a product or writing an essay. These activities promote students' creativity, learning on their own and allowing students to take responsibility that enable them to develop a broad range of skills for future professional lives (OECD, 2010).

This study therefore adopts the theoretical model of TALIS by using two types of teacher beliefs (direct transmissive and constructivist beliefs) and three broad categories of teaching practices (structuring, student orientation and enhanced activities) to unravel the relationship among these concepts for untrained teachers in public and private basic schools in the Ghanaian context.

Relationship between teacher beliefs and teaching practices

There is a wealth of research evidence that indicates that teacher beliefs about teaching and learning have a direct bearing on teachers' daily instruction (Mansour, 2013; Mede, 2017; Zheng, 2013). According to Cephe and Yalcin (2015), teachers' decisions concerning classroom practices are usually based on their beliefs about teaching and learning. Therefore, beliefs have a strong effect on what teachers and learners do in class. By extension, other studies have indicated that teachers' beliefs have the power of greatly affecting students' learning outcomes and even learners' beliefs about learning.

There have been inconsistent findings with regard to the relationship between teacher beliefs and teaching practices. A study in Greece using secondary school Mathematics teachers (Barkatsas &

Malone, 2005) found a good level of interaction of teacher beliefs and teaching practices in teachers' daily work. However, it discovered that this was not always the case since the study further revealed inconsistencies between teachers' instructional practices and their beliefs. Through the study on Head Start quality programme with 190 classroom observations and survey, Ramos-Marcuse and Arsenio (2001) found a moderate correlation between self-reported beliefs and self-reported practices as well as observed classroom practices. A study by Jorgensen, Grootenboer, Niesche, and Lerman (2010) found that teachers' beliefs did not match with their instructional practices in the Australian context. Their study further revealed that teacher beliefs are context-based and hence, as teachers gather experiences on their job, their instructional practices are then shaped by their changing beliefs. In supporting inconsistencies in teacher beliefs and teaching practices, Poulson, Avramidis, Fox, Medwell, and Wary (2001) cautioned that the relationship between teacher beliefs and practices is a more complex one. For them, practice does not always occur after beliefs have been formed. Zheng (2013) assert that school context issues may be a direct factor that hinders some teachers from practicing their beliefs in the classroom due to some negative consequences. All these studies were done with professionally trained teachers in developed countries. It will be more important to look at studies that looked at untrained teachers in resource-limited contexts such as Ghana, since in such contexts, very little is known about untrained teachers' beliefs that shape their classroom practices.

The Context of Untrained Teachers in Ghana

The number of untrained teachers in basic schools has increased substantially over the last decade given that trained teachers alone cannot meet the rising demand for teachers as a result of increased enrolment (MOE, 2017). Trained teachers are mostly unwilling to accept postings to deprived areas and when they do, they usually leave these places in the first two years of teaching either to urban areas or for further studies (Akyeampong, 2003; Cobbold, 2007). Thus, the need to deploy untrained teachers in these deprived areas to fill vacant teaching positions becomes urgent. Furthermore, Ghana has lately witnessed a surge in private participation in education not only in urban areas but also in peri-urban and rural areas. Data from the Ministry of Education (MOE, 2017) suggests growth in the number of private

schools in Ghana, with a recent estimated share of about 17% of total enrolment (Stuart, Akyeampong, & Croft, 2009). To buttress the growth of private schools, Tooley, Dixon, and Amuah, (2007) pointed out that poor quality basic schooling has encouraged the growth of low-fee private schools. The percentage of untrained teachers in these private schools has been soaring for the past decade compared to public schools, which saw a decrease in the percentage of untrained teachers from 40.7% in 2007/08 to 24.0% in the 2016/17 academic year. The decrease in the number of untrained teachers in the public sector is as a result of massive upgrading of in-service untrained teachers through the Untrained Teacher Diploma in Basic Education (UTDBE) programme. However, there are still substantial number of untrained teachers in public schools mainly as a result of teacher attrition and soaring enrolments especially in rural areas (MOE, 2017).

There are few studies that have looked at untrained teachers' practices in Ghana. For example, a study by Casely Hayford et. al., (2013) reveals that untrained teachers lack pedagogical knowledge and skills that could improve students' learning in basic schools. However, this study looked at only untrained teachers in public basic schools. In the same study by Casely Hayford, head teachers in most schools served as mentors supporting untrained teachers in their classroom practices. This is also the case in most African countries which have many untrained teachers teaching in underprivileged communities (Rural teachers, 2016). Despite the enormous works that untrained teachers go through in their work, coupled with low remuneration, low esteem and job insecurities, many of them have limited opportunities in upgrading their skills through in-service training programmes (Mulkeen, 2010; Tanaka, 2012).

Untrained teachers in private schools engage their pupils on hands-on activities, spend more instructional time with pupils and have lower teacher absenteeism (Tooley, Dixon, & Amuah, 2007). Many of the studies on untrained teachers have not looked at what kind of beliefs they hold about teaching and learning that inform their practices. Also, are these beliefs and practices the same in public and private schools? This study fills this gap in the literature with regard to the kind of beliefs untrained teachers hold that inform their teaching practices.

Method

The study utilized quantitative data from a teacher questionnaire. A total of 188 in-service untrained teachers participated in a survey from 20th November 2016 to 30th February, 2017. The survey brought to the fore the teaching practices and beliefs of untrained teachers in public and private basic schools in a snapshot. A multi-stage sampling procedure was used to select basic schools in a District in the Central Region of Southern Ghana for the study. All 226 public and 168 private basic schools in the Mfantseman Municipality were grouped into rural and urban schools based on the Municipality's criteria for urban and rural schools. Untrained teachers were found in 182 out of the 226 public schools and in all 168 private schools in the Municipality. Consequently, a simple random sampling was done to select 20 public and 10 private schools from the rural-urban grouping. A table for estimating the sample size from a given population by Kreicie and Morgan (cited in Cohen, Manion & Morrison, 2013) was used to determine the teachers' sample size in each group. In the selected schools, all the teachers present at the time of data collection were included in the study. This yielded a total of 188 teachers in all the 30 schools.

Table 1: Background characteristics of teachers

	N	%
School type		
Public	78	41.5
Private	110	58.5
Sex		
Male	104	55.3
Female	84	44.7
Age		
Below 25	88	46.8
25-29	52	27.7
30-39	37	19.7
40-49	4	2.1
50+	7	3.7
Academic qualification		
WASSSCE	162	86.2
Degree	7	3.7
HND	4	2.1

	N	%
Others	15	8.0
Teaching experience (years)		
< 1	21	11.2
1-5	127	67.6
6-10	27	14.4
11-15	7	3.7
16-20	4	2.1
20+	2	1.1

The participants comprised 78 (41.5%) and 110 (58.5%) teachers from public and private basic schools respectively. As indicated in Table 1, the sample consisted of 104 males and 84 females with the highest number having ages below 25 years while the lowest number had ages between 40 and 49 years. The academic qualifications of the teachers ranged from West Africa Senior Secondary School Certificate Examination (WASSSCE) to Bachelor's Degree and Higher National Diploma (HND). More than 85% of the participants had WASSSCE as their highest academic qualification with the remaining having a Bachelor's Degree, HND or Post-secondary certificates. Most of the teachers (67.6%) had taught for between 1-5 years, whilst 14.4% had teaching experience of 6-10 years and two of them with more than 20 years' experience.

Instrument

The Teaching and Learning International Survey (TALIS) Teacher Questionnaire (OECD, 2010) was adapted for this study. The TALIS teacher questionnaire was used in 2008 to assess teaching practices and beliefs in over 30 countries in the Organisation for Economic Co-operation Development (OECD) region. The questionnaire had three sections; Section 'A' sought data on the background information of the untrained teachers while Section 'B' sought the views of the teachers on their beliefs about teaching and learning. Items under this section were adapted from the TALIS Teacher Questionnaire and items grouped under Direct Transmissive Beliefs (e.g. "effective/good teachers demonstrate the correct way to solve problems", "instructions should be built around problems with clear, correct answers and around ideas that most students can grasp") and Constructivist beliefs (e.g. "my role as a teacher is to facilitate

students' own inquiry", "students learn best by finding solutions to problems on their own"). To each item under this section, students' responses ranged from 'strongly disagree', 'disagree', 'not sure', 'agree' and 'strongly agree'. Section 'C' sought to find out from teachers how often classroom activities happen in their class throughout the school year. This section was subdivided into three parts (structuring, student oriented practices and enhanced activities). This section also consisted a Likert-type scale that required teachers' frequency estimations on a five-point, Likert-type scale, ranging from 'never or hardly ever', 'In about one-quarter of lessons', 'In about one-half of lessons', 'In about three-quarters of lessons' to 'In almost every lesson'.

Pre-testing of questionnaire

The questionnaire was pre-tested in two basic schools in the Sekondi-Takoradi Metropolis in the Western Region. Untrained teachers in this Metropolis had similar characteristics (qualification, sex, etc.) with untrained teachers in the Central Region. There were 42 untrained teachers who participated in the pre-testing exercise. The internal consistency reliability using the individual as the unit of analysis was satisfactory (Table 2).

Table 2: Internal consistency (Cronbach alpha coefficient)

Scale	Alpha reliability
Direct transmissive beliefs	0.85
Constructivist beliefs	0.74
Structuring	0.76
Student oriented practices	0.81
Enhanced activities	0.69

Procedure

The study was conducted in the Mfantseman Municipality, located in the Central Region of Ghana. Permission was sought from the Municipal Directorate of Education to conduct the study in the selected schools. All untrained teachers in selected schools were assembled to explain the purpose of the study after permission letter from the Education Office had been seen and approved by the Head teacher of the schools. The survey was conducted in two months from November, 2016 to February, 2017. The Untrained Teacher

Questionnaire was also distributed to all untrained teachers. I administered the questionnaires to teachers on the first day of my visit to each school. In order not to disrupt instructional hours, I waited for break times for teachers to complete the questionnaire. Teachers took an average of 12 minutes to complete the questionnaire.

Data analysis

Teaching practices of all the categories of teachers were analysed with the use of means and standard deviations compared across school types. Items on the questionnaire were assigned values on a five-point Likert scale format (1=never or hardly ever, 2=in about one-quarter of lessons, 3=in about one-half of lessons, 4=in about three-quarters of lessons and 5=in almost every lesson). Since the scale was a five-point Likert-type format, 3.0, was the mid-point, hence, activity items with means below 3.0 were considered as those not happening much in a teacher's class. Activity items with mean scores above 3.0 were considered as those happening much in the teacher's class. To examine the teachers' beliefs on teaching and learning, the teachers' responded to 10 items on the questionnaire on a four-point Likert-type scale, ranging from 1= "strongly disagree" to 4= "strongly agree". The items on beliefs have been divided into 'direct transmissive beliefs' on teaching and learning and 'constructivist beliefs' on teaching and learning. Pierson's-correlation coefficient was used to examine the relationship between teacher beliefs and reported teaching practices in both school types. Multivariate of analysis of variance (MANOVA) was used to find out differences in the three broad themes of teaching practices (structuring, student-oriented practices and enhanced activities).

Results

Untrained teachers' beliefs on teaching and learning

As indicated in Table 3, the teachers endorsed the direct transmissive beliefs more than the constructivist beliefs as they scored high means above 3.0. Furthermore, the direct transmissive beliefs were more pronounced among teachers in the private schools compared to their counterparts in the public schools. For example, the mean score of private school teachers (M=3.6, SD=0.7) was higher than that of public school teachers (M=3.1, SD=0.6;) on the item "instructions should be built around problems with clear, correct answers and around

ideas that most students can grasp”. Unlike the mean scores for the direct transmissive beliefs, the mean scores for items such as “my role as a teacher is to facilitate students’ own inquiry” and “thinking and reasoning processes were more important than specific curriculum content” were below 3.0 with the exception of item 6 whose mean scores were higher (above 3.0), indicating low endorsement of constructivist beliefs by the teachers in both school types.

Table 3: Beliefs on teaching and learning

Teacher beliefs	Public (78)		Private (110)	
	M	SD	M	SD
1. Effective/good teachers demonstrate the correct way to solve a problem	3.4	0.6	3.8	0.7
2. My role as a teacher is to facilitate students’ own inquiry	2.9	0.8	2.6	0.9
3. A quiet classroom is generally needed for effective learning	3.2	0.4	3.6	0.6
4. Students learn best by finding solutions to problems on their own	3.4	0.9	2.8	0.8
5. Instruction should be built around problems with clear, correct answers and around ideas that most students can grasp	3.1	0.6	3.6	0.7
6. Students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved	3.2	0.6	3.4	0.6
7. Thinking and reasoning processes are more important than specific curriculum content	2.4	0.9	2.1	0.9
8. How much students learn depends on how much background knowledge they have-that is why teaching facts is so necessary	2.9	0.6	3.1	0.6

Untrained teachers' teaching practices

Table 4 shows the means and standard deviations of the three themes developed around teaching practices: structuring, student oriented and enhanced activities. There were high mean scores for all the teachers in both public and private schools on four out of five items measuring 'structured activities'. However, on the item "I explicitly state learning goals at the beginning of each lesson to my students", the mean score was higher for the teachers in private schools (M=3.5, SD=1.6) than for their counterparts in public schools (M=2.4, SD=1.7). The results further show low mean scores for both student-oriented practices and enhanced activities for the untrained teachers in both school types, for example "thinking and reasoning processes are more important than specific curriculum content" (public, M=2.4, SD=0.9; private, M=2.1, SD=0.9).

Table 4: Mean scores on teaching practices by school type

Teaching practices	Public		Private	
	M	SD	M	SD
1. I review with students the homework they have prepared	4.4	0.9	4.0	1.3
2. Students work in small groups to come up with a joint solution to a problem or task	3.5	1.1	2.9	1.5
3. I give different work to the students that have difficulties learning and/or to those who can advance faster	2.2	1.6	2.2	1.6
4. At the beginning of the lesson I present a short summary of the previous lesson	4.7	0.9	4.3	1.2
5. I explicitly state learning goals at the beginning of each lesson to my students	2.4	1.7	3.5	1.6
6. I ask my students to remember every step in a procedure	4.1	1.6	4.2	1.7
7. I ask my students to suggest or to help plan classroom activities or topics	2.4	1.7	2.0	1.5
8. I check my students' exercise books	4.9	0.3	4.7	0.7

Teaching practices	Public		Private	
9. Students work on projects that require at least one week to complete	1.7	1.3	2.2	1.6
10. Students work in groups based upon their abilities	2.3	1.4	2.6	1.6
11. Students make a product that will be used by someone else	2.2	1.4	1.9	1.3
12. Students hold a debate and argue point of view which may not be their own	1.9	1.3	1.9	1.3
13. Students evaluate and reflect upon their own work	2.7	1.7	3.0	1.7

Relationship between teacher beliefs and teaching practices

The relationship between the teachers' beliefs and their reported teaching practices has been presented in Table 5. The results in Table 5 show that teachers' direct transmissive beliefs were negatively related to their reported teaching practices in public schools. For example, there was a medium, negative relationship ($r=-.47$, $n=187$, $p<.01$) between public school teachers' direct transmissive belief and student-oriented practices which suggested that the more the teachers believe in direct transmissive belief, the less frequently they employed student-oriented practices. This was also true for teachers in private schools except with weak correlation between direct transmissive belief and student-oriented and enhanced activities. There was a positive relationship between teacher beliefs and structuring practices in both school types. Furthermore, there was a negative relationship between the constructivist belief and student-oriented practices in both public and private schools. However, there was weak positive relationship between constructivist beliefs and enhanced activities in both schools.

Table 5: Bivariate Correlation between teacher beliefs and teaching practices in public schools

		Direct transmissive belief	Constructivist belief	Structuring	Student-oriented practices	Enhanced activities
Direct transmissive belief						
Public		-	-	.31**	-.47**	-.04
Private		-	-	.02	-.06**	-.05
Constructivist belief						
Public		-	-	.25*	-.13	.00
Private		-	-	.02	-.02	.06

*Significant, $p < 0.05$ (2-tailed)

**Significant $p < 0.01$ level (2-tailed)

Differences between teachers’ beliefs and teaching practices

School-type related differences in teacher beliefs were explored using one-way multivariate analysis of variance (MANOVA) with a set of two scales as dependent variables (Direct transmissive beliefs and Constructivist beliefs) and type of school (public and private). Results of the MANOVA test show that there was a statistically significant difference among untrained teachers in public and private schools on the two scales combined: $F(2, 185)=21.82, p=.001$; Wilks’ Lambda (Λ)=.81; partial eta squared =.20. When the results for the dependent variables were considered separately, differences in direct transmissive beliefs: $F(1,186)=25.02, p=0.001$, partial eta squared=0.065; = 0.12 and constructivists beliefs: $F(1,186)=11.71, p=0.001$, partial eta squared = 0.06 reached statistical significance using a Bonferroni adjusted alpha level of 0.025. Furthermore, school-type related differences in teachers’ teaching practices were explored using one-way multivariate analysis of variance (MANOVA) with a set of three scales as dependent variables, teaching practices (structuring, student-oriented practices, enhanced activities) and type of school: public and private. Again, results of the MANOVA test shows that there was no statistically significant difference among untrained teachers in public and private schools on the three scales combined: $F(3, 184)=1.53, p=.21$; Wilks’ Lambda (Λ)=.97; partial eta squared =.02

Discussion

The findings of this study reveal that untrained teachers in both public and private schools were more in favour of the direct transmission beliefs. However, this belief was more pronounced in teachers in private schools. This finding supports previous studies which showed that teachers tend to hold more of direct transmissive beliefs and less of constructivist beliefs (Mede, 2017; OECD, 2010). The reason for this finding is not surprising since untrained teachers will always want to keep their job due to job insecurity; hence, engage students more on how to grasp concepts in a procedural manner, which will eventually produce good learning outcomes. Furthermore, untrained teachers may also develop more of these direct transmissive beliefs as a result of their previous experience of teaching when they were students (Wall, 2016; Zheng, 2013). According to Wall (2016), teachers' beliefs about teaching and learning is affected by factors such as school context, years of teaching experience and teachers' past experiences of teaching when they were students. It is also possible these teachers have formed robust beliefs supporting notions of teacher-centred approaches based on their past experiences of schooling.

The study further shows that many of the teachers in both public and private schools reported to be in favour of structured practices. Structured practices are consistent with the whole-class teaching methods such as starting a lesson with a review of lesson objectives, outlining the content to be taught, signaling transitions between lesson parts, reviewing previous lesson taught, and going over home work, etc. This finding resonates with those studies conducted in some developed countries (OECD, 2010; Stronge, Ward, & Grant, 2011) where teachers used structured practices more frequently than other practices. Other studies (Ngware, Oketch, & Mutisya, 2014; Zheng & Borg, 2014) have also shown that structured practices when employed appropriately promote students learning. However, if these practices are not handled well in class, it may promote rote learning among students.

Student-oriented practices and enhanced activities which have proven to increase student learning were less favourable to the untrained teachers. A tentative reason for this finding is that untrained teachers lack professional training in their teaching, hence build their dossier of knowledge from their teaching experience and sometimes the mentorship they get from heads of schools who are usually professionals. A study by Adu-Yeboah (2011) found that newly

qualified teachers practiced more of procedural activities which align to structured practices. Furthermore, the OECD (2010) study also found that experienced teachers reported to favour structured practices more and less of enhanced and student-oriented activities. The connection between these professional teachers' findings and what this study finds about untrained teachers happen to be almost similar, hence do untrained teachers learn these practices from the colleague trained teachers or they are left alone to form their beliefs on teaching and learning?

The assumption that teachers' beliefs reflect their classroom practices (Mede, 2017; Zheng, 2013) is not supported by the findings of this study. There were inconsistent results in the relationship between teacher beliefs and teaching practices. While direct transmissive belief had a positive relationship with structured practices in both school types, there was a negative relationship between direct transmissive belief and student-oriented practices in all the schools. The assumption is that teachers with constructivist beliefs would employ more of student-oriented and enhanced activities in their classrooms. However, this study's findings suggest that the untrained teachers with constructivist beliefs reported to employ more of structured practices in their teaching. This finding is consistent with the result of Jorgesen et al., (2010) in Australia where teachers' belief did not match with their instructional practices. As stated earlier, untrained teachers' lack of professional training put them in a 'sink or swim' position where they are left alone to form their own beliefs and practices that will produce good student learning outcomes (Cobbold, 2007).

This study reveals that there was statistically significant difference between teacher beliefs and school-type (i.e. public and private). Untrained teachers in the private school reported higher means on transmissive beliefs than their counterparts in the public school. This finding confirms (Casely-Hayford et al., 2013) study where untrained teachers in private schools tend to engage their students more during instructional hours in Ghana. Untrained teachers are mostly Senior High School graduates who may be 'resitting' some failed subjects to continue their education and have little experience in teaching. Consequently, in most private schools, head teachers and school proprietors promote intense supervision for their students to produce good results in national standardized exams in order to stay in business. Teachers therefore engage their students more in grasping content

knowledge through procedural activities to promote learning in their schools. This may be a tentative reason why some private schools in Ghana out-perform their public counterparts in most national examinations. Also, most experienced professional teachers who retire from active service in public schools usually find themselves in these private schools either as school heads or teachers, and hence, use their professional instructional leadership to train some of the untrained teachers on pedagogical skills to eventually produce good learning outcomes.

Conclusion and Recommendations

This study presents evidence on the beliefs and teaching practices of untrained teachers in both private and public basic schools in the Ghanaian context. The study findings have practical educational implications by providing insights into teaching practices of untrained teachers in private and public basic schools in Ghana. The study has revealed that untrained teachers have both transmissive and constructive beliefs that inform their teaching practices in classrooms. This suggests that if these teachers are able to get professional training to upgrade their pedagogical practices, they will be able to better articulate their beliefs and reflections which will improve their teaching to promote student learning. Furthermore, since private schools are contributing greatly to the Education for All (EFA) agenda, the Government of Ghana should initiate school-based in-service education and training programmes for untrained teachers in both public and private school, since they all serve Ghanaian children. The mismatched relationship between teacher beliefs and teaching practices makes it evident that teachers' beliefs do change with experiences and may not necessarily reflect their classroom practices. Hence, teachers' in-service, induction and teacher education programmes should be effective in creating more conscious and consistent teacher beliefs that will promote good instructional practices. The findings of this study have wider implications for other developing contexts in Sub Sahara African.

The Untrained Teachers' Diploma in Basic Education (UTDBE) programme initiated by the Government of Ghana was meant to upgrade untrained teachers to have professional status. However, many private schools' teachers could not enroll on the programme. Nevertheless, some untrained teachers in private schools have taken

advantage of distance education programmes in the various Universities to upgrade their skills in teaching. I therefore recommend that the Ghana Education Service through the Ministry of Education should develop a sustainable in-service upgrading programme to continuously upgrade untrained teachers to become professional teachers since the recruitment of untrained teachers has become inevitable due to teacher attrition and poor service conditions for teachers especially in under privileged communities.

The results of the study suggest that it is important to further have a study to compare the teacher beliefs and practices of newly qualified and experienced trained teachers in both public and private schools. Although, the present study reveals important findings, the findings should be taken as suggestive due to the following weaknesses. First, since the sample was drawn from one municipality in the Central Region of Ghana which has some unique characteristics, the generalizability of the findings is limited. Furthermore, the actual teaching practices of the teachers could have been observed to compare their reported teaching practices, beliefs and actual teaching practices. A further study could be done to have teaching practices of the untrained teachers observed compared to their reported beliefs.

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