Original Research

Preparing Teacher Trainees for Field Experience: Lessons From the On-Campus Practical Experience in Colleges of Education in Ghana

Christine Adu-Yeboah[1] and Christopher Yaw Kwaah[1] (iD)

Abstract

This study sought to understand the process of providing on-campus practical experience to teacher trainees in preparation for practicum in basic schools, and how the trainees perceive these. It used the mixed method approach to obtain data from three purposively sampled colleges of education in the Central Region of Ghana. Questionnaires were administered to 232 teacher trainees; 12 focus group discussion sessions were held with the trainees while an interview guide was used to elicit data from 24 college tutors. The findings showed that the on-campus experience offered trainees the opportunity to improve on their knowledge and practice of general pedagogical skills such as the writing of lesson plans, statement of appropriate lesson objectives, lesson delivery, timing of activities, and the use of teaching and learning resources. However, there was no evidence of documented standards and guidelines for the conduct of the on-campus practicum. Again, trainees had very limited time to engage with supervisors and critically interrogate and reflect on their own practices. Consequently, it was suggested that teacher training institutions should develop appropriate teaching standards and guidelines for on-campus teaching practice and give trainees more opportunity to engage with and critically interrogate their own practice in the process of learning to teach.

Keywords

initial teacher education, on-campus teaching, practice field experience, student teacher, teacher trainee

Introduction

This article reports on a study of teacher trainees' experiences and perception of on-campus teaching practice (OCTP) in three Colleges of Education (CoEs) in the southern part of Ghana. The study explored and described the processes involved in preparing teacher trainees for teaching in real schools and classrooms. This was intended to provide information on the current situation of certain aspects of teacher education in Ghana and the kind of preparation the teacher trainees go through before they embark on actual teaching. It was expected that the study would enable implications to be drawn for the provision of support for trainees in their off-campus teaching, and for improving the practicum of CoEs in Ghana generally. This investigation comes in the wake of major restructuring of teacher education in Ghana in the last decade, and the need to reflect retrospectively on the changes undertaken to ascertain whether the intended objectives are being achieved.

Initial Teacher Education (ITE) in Ghana underwent major restructuring in 2004 when it came under criticism in the 1990s for overemphasizing and testing subject content

knowledge above the practical teaching component (Ministry of Education, 1993). According to an evaluation by the National Commission on Teacher Education (Ministry of Education, 1993), teacher trainees had very little exposure to real classrooms in the course of their training, a situation which eventually made them ineffective teachers. To address this, and improve teacher trainees' classroom practices in real schools, the "In-In-Out" model was introduced among other things, to strike a good balance between theory and practice by reducing the trainees' residential program from 3 to 2 years ("In-In") and increasing their practical teaching experience from two blocks of 4-week practicum to 1 year ("Out"; Institute of Education, 2005). In addition, teacher trainees were made to undergo a school observation visit after the first year of training and a period of OCTP in the

[1]University of Cape Coast, Ghana

Corresponding Author:
Christopher Yaw Kwaah, College of Education Studies, University of Cape Coast, Cape Coast, Ghana.
Email: christopher.kwaah@ucc.edu.gh

course of the 2 years residential program to practice teaching to their peers in preparation for off-campus teaching practice in real schools.

Regarding the school observation visits, trainees are expected to find a school in their locality when they are on vacation (usually in December or April/May) where for a minimum of 2 weeks, they would observe school and classroom processes and practices. An introductory letter from the principal of the college of education would normally be requested by the head teacher of the basic school before the trainee is attached to a class and an experienced teacher for the exercise. At the end of the observation, a confidential report is submitted to the college by the headmaster, in collaboration with the mentor or class teacher.

The OCTP, on the other hand, is conducted as part of the residential training program. A minimum of 3 weeks is set aside in the course of the semester for it. During the period, teacher educators are assigned to a group of trainees (8-10 in a group) for guidance and support in preparing teaching and learning materials, lesson notes, and for peer teaching. About 2 hr is devoted to the exercise every afternoon after the normal college lectures. Trainees are made to teach (to) their peers in the small groups assigned to teacher educators, with the teacher educators serving as supervisors. The trainees and their supervisors make notes of their observation on each student's performance and share them after each teaching session. This exercise is expected to develop trainees' skills in lesson notes preparation, selection of appropriate teaching/learning resources, confidence to stand in front of a class, effective management of time, and appropriate application of teaching techniques.

In 2011, a "Teacher Preparation in Africa" research project found that contrary to what the restructuring put in place, very little in terms of practical-oriented training (e.g., preparation of teaching and learning materials and peer teaching) happened during the 2-year residential training program in the CoEs in Ghana. Essentially, the 2-year residential program devoted little time to practical activities on-campus, and teacher trainees were dispirited toward them because the activities did not count toward their final grading (Adu-Yeboah, 2011). The conclusion was that the practical component of the 2-year residential program did not attract stakeholder attention, although it forms the basis for trainees' preparation for off-campus teaching practice and initiation into actual teaching. Moreover, no prior studies have specifically looked into the processes of preparing teachers for teaching in real classrooms in Ghana. Therefore, an examination of the practice was deemed important for improving teacher trainees' teaching practice and consequently their professional outcomes. The following research questions were thus formulated to guide this investigation:

Research Question 1: How do preservice teachers of the Central Region of Ghana perceive and experience practical training on-campus?

Research Question 2: What kind of preparation goes on before the OCTP?
Research Question 3: How is the OCTP used to prepare preservice teachers for the off-campus teaching practice?

The next section of this article briefly describes the process of becoming a teacher in Ghana. This is followed by a review of the literature on practicum in ITE programs, especially in Sub-Saharan Africa (SSA) and its relevance to teacher education practices. Following that, we describe details of the study's methodology, the results and discussion. The article ends with conclusion and recommendations for the training of teachers in Ghana and other similar contexts.

Becoming a Teacher in Ghana

There are currently 46 publicly funded and two privately owned colleges for the training of preservice teachers to teach in basic schools (Grades 1-9) in Ghana. Traditionally, two public universities train teachers for senior high schools. Other public and private universities run teacher education programs to complement the deployment of teachers. The CoEs run 3-year diploma awarding programs known as Diploma in Basic Education (DBE). This article focuses on the 3-year residential program offered by all the CoEs. The structure of the program run in the colleges is commonly termed "In-In-Out," meaning preservice teachers spend the first year of their training in the college for studies in foundation academic courses (subject content knowledge) and introductory education courses. Furthermore, preservice teachers undertake school attachment which involves observation of school and classroom processes/practices at the end of the first year. The second year is also spent in the college for curriculum studies, courses in pedagogy for all subject areas, education studies, and OCTP.

The third year, however, is spent outside the college and is devoted to teaching practice and after-school group studies (study conference) with Distance Learning Materials (DLMs) to reinforce and support the pedagogical studies undertaken in college. The study conferences are organized by groups of trainees numbering 10 to 15 in every school of attachment (see Figure 1). They meet after normal class hours for about 3 hr, twice or thrice weekly to discuss topics in their DLMs, with one of them serving as the study-group leader. College tutors are usually assigned to the groups of students to serve as link tutors to facilitate and support the study conferences.

Practicum in the Context of ITE Program

The study is critically underpinned by the understanding that teacher education is both part of the problem and the solution to poor quality of teachers' teaching and students'

1. Foundation academic courses 2. Introductory Education courses	School observation visit (During vacation)	1. Methods of teaching subject courses 2. Curriculum studies 3. Education courses 4. Foundation academic courses	On-Campus teaching practice (peer teaching)	Off-Campus teaching practice (field experience)	1. Project work 2. Educational courses studies via Distance (DLMS)
Year One (In)		Year Two (In)			Year Three (Out)

Figure I. Three-year diploma in basic education in colleges of education.

learning (Akyeampong, Pryor, & Ampiah, 2006; Pontefract & Hardman, 2005). This implies that good quality initial training leads to good quality beginning teachers (Cetin, 2013; Sen, 2010). By inference, a good quality teacher practicum can be said to be crucial to the type of training experience preservice teachers receive to meet the demands of teaching in real schools. The indicators of such a system can be gleaned from the inputs and processes of the program. The framework for a good quality practicum of a teacher education program should therefore focus on a structural and operational design that will enhance the teaching experiences of preservice teachers.

Practicum is a form of experiential learning that could be described as field-based learning, work-based learning, learning by doing or learning from action (Lonergran & Anderson, 1988). Teaching practicum is an opportunity to observe and work with real students, teachers, and curriculum settings. Practicum does not only bridge the gap between theory and practice in learning to teach but it provides the opportunity for preservice teachers to develop their personal teaching competence (Brouwer & Korthagen, 2005). Akyeampong and Lewin (2002) recognize practicum as an essential component of ITE programs in that it provides opportunity for preservice teachers to apply the knowledge and theories learned to classroom situations. However, studies conducted in SSA have described the ITE programs in many countries as being outdated, misaligned with the school curriculum, overly theoretical and distant from school contexts (Lauwerier & Akkari, 2015; Mulkeen, 2010). Westbrook, Brown, Pryor, and Salvi's (2013) systematic review of teacher training in developing countries found that teacher educators relied heavily on question and answer: lecture methods of teaching at the expense of pedagogical practices are promoted in schools. Furthermore, in most SSA countries, unguided and unsupervised practicum experiences of preservice teachers leave preservice teachers to their fate in understanding their practicum experiences and practice, as they "sink or swim" (Schweisfurth, 2015). The TPA study also found that even though preservice teachers found practicum to be very beneficial to their professional development, they rarely got the chance to observe teaching or teach in early grade reading classes (Adu-Yeboah, 2010). There is a dearth of empirical evidence that suggests that preservice teachers need to observe experienced teachers in schools and campus-based teaching practice (OCTP) to prepare them for field-based experience (Adu-Yeboah, 2010; Akyeampong & Lewin, 2002; Akyeampong, Lussier, Pryor, & Westbrook, 2013; Akyeampong & Stephens, 2002).

On-campus or campus-based practicum forms part of the overall practicum activities of most teacher education programs (Akyeampong et al., 2013). It usually prepares trainees' professional competencies, improve their pedagogical skills, and build their confidence for application in school-based practicum and in their overall teaching profession The teacher education literature (Bilen, 2015; Kilic, 2010; Zeichner, 2010) accentuates the main activities of OCTP as follows: trainees' observation of experienced teachers teaching, and peer/microteaching among trainees. On-campus preparation for teaching, known as "microteaching" was developed by Stanford University in the 1960s in the United States to help address some of the practical problems of teacher preparation. Microteaching is a teaching environment which is minimized, limited, and somehow artificialized when compared with the real classroom environment. Synonymous to "microteaching" is "peer teaching" which is administered in small groups made up of peers or mentors (Bilen, 2015; Kilic, 2010). The basic premise of the peer teaching is that trainees will have the opportunity to practice effective teaching strategies and learn from their own peers. The international literature reveals that both microteaching and peer teaching carry the same significance except for the practice group chosen for the course (Bilen, 2015; Kilic, 2010; Zeichner, 2010).

Peer teaching or microteaching which is also known as OCTP helps trainees to develop skills in the beginning of learning to teach: to prepare lesson plans, choose teaching goals and appropriate teaching/learning resources, speak in front of group, manage time effectively, and apply appropriate assessment techniques (Kilic, 2010). In this way, student teachers improve their classroom management skills through the constructive feedback from their tutors, peers' critiques, and self-reflection which add to trainees' repertoire of pedagogical content knowledge needed for their teaching profession. A study on learning processes during on-campus practicum in Switzerland (Hascher, Cocard, & Moser, 2004) found that OCTP increases student teachers' professional skills and positive change in attitudes toward pupils. Similarly, Kilic's (2010) experimental study using the learner-centered microteaching model showed preservice teachers' progression on lesson planning, classroom management skills, and communication. In developed contexts such as the United States, England, and Germany, several studies (Darling-Hammond, 2005; Parr, Wilson, Godinho, & Longaretti, 2004; Zeichner, 2010) have revealed the important role campus-based peer teaching sessions have played in the improvement of preservice teachers' learner-centered pedagogical skills which have seen successful practicum programs in preparing teachers to teach in schools. Most OCTP activities usually employ microteaching which consists of pre-observation, observation note taking, analysis-strategy, viewing video tapes, and self-evaluation of trainees' stages (Jones, 2000; Parr et al., 2004).

Nevertheless, some researchers have questioned student teachers' acquisition of certain vital skills during OCTP (Bilen, 2015; Borko & Mayfield, 1995). They claim that the acquisition of essential professional skills and certain teaching standards are not met during practicum sessions (Sen, 2010). Hascher et al. (2004), for example, argue that the quality of student teachers' learning during campus-based practicum varies as it depends on the quality of feedback from mentors, effective organization of practicum, and the quality of reflection of the lessons among student teachers.

This current study seeks to bring to bear the current situation of on-campus practicum in CoEs in Ghana as a way of preparing teachers for teaching in real schools, and thereby, add to the existing literature on the subject.

Method

Research Design

This study was exploratory and employed the sequential mixed method approach to study aspects of the on-campus practicum program of selected publicly funded CoEs in the Central Region of Ghana. We used the approach for the purpose of triangulation and for obtaining a deeper understanding of the processes of providing teaching experience to preservice teachers. Three colleges in the Central Region were purposively selected based on their proximity to the researchers. There were a total of 854 second year students in all the colleges with 259 in College A, 302 in College B, and 293 in College C. Out of these numbers, at each college, between 35% and 40% of the total number of second year students were randomly sampled for questionnaire administration. Therefore, 90 trainees in College A, 111 in College B, and 99 in College C participated in the questionnaire administration. In addition, 18 tutors who supervised practicum sessions were sampled for individual interviews. This comprised six tutors in each college (this includes the teaching practice coordinator). There was also random sampling of six different micro/peer teaching groups for observation in Colleges A and B while eight lesson observations were done in College C, making a total of 20 lessons. Two focus group interviews with five to six students each were carried out in each college depending on the number of academic programs run by the college. Sampling was done such that as much as possible there was gender representation in the mixed institutions as well as representations from each of the academic programs (i.e., Maths/Science, General Arts, Technical Skills, and Early Childhood Education).

Instruments

Three instruments were designed to obtain data: a questionnaire (Appendix A), an observation checklist (Appendix B) and interview guide (Appendix C). The questionnaires were

administered to students in the second year who had undergone studies in subject pedagogy. It sought information on the students' personal data, preparation for OCTP, its conduct and supervision, as well as their perception of the program. The observation checklist was designed to observe OCTP in session in the three colleges. Aspects of the program such as the number of students in a group, the number of tutors assigned to each group of students, the duration of the sessions, the number of students that taught in each session, and the duration of the lessons were observed. There were 20 to 25 trainees in each class with one tutor as the supervisor. Each trainee had an average of 15 min to deliver a lesson, including post-teaching comments. Interview guide (Appendix D) for teaching practice coordinators, tutors, and the students sought information on the processes involved in the preparation and conduct of the OCTP program.

Data Collection Method

Data collection began in the colleges between May and June 2015. On May 14, 2015, principals of the colleges were contacted through writing to negotiate entry and access to the college, tutors, and students for the study. The purpose of the study was explained to them, as well as the data to be collected. Consequently, dates for the conduct of the OCTP of the second year students of the 2014-2015 academic year were obtained, and the plan for data collection was shared with each college. First, a team of three researchers administered the questionnaires to the second year students in all the colleges within 1 week. In each college, students were grouped in their classes where the researchers sought their consent to participate and withdraw voluntarily, after the purpose and procedure of the study had been explained so they knew what to expect. To cater for the consequences of the interview and confidentiality, the participants' attention was drawn to the study's likely impact on (or benefit to) them and guaranteed confidentiality and anonymity of the information they would provide. In total, 3 weeks were used to administer the questionnaires in the three colleges, and in each case, there was a 100% return rate.

In the second phase of data collection which followed immediately after the questionnaire administration with the same group of second year students, the OCTP sessions were observed with post-observation interviews. In total, 4 days were used in each college to observe a total of five sessions of OCTP and conduct students' and tutors' interviews. After each session, one focus group discussion (FGD) with a minimum of five students and individual interviews with six tutors were conducted.

Participants

A total of 300 preservice teachers in their second year, comprising 90 from an all-female College A, 111 from College B (69 males and 42 females), and 99 from College C comprising 70 males and 29 females responded to the questionnaire. More females participated in the study because one of the three colleges (College A) for the study was a female-only institution. Majority (71%) of the trainees' ages fell within the range of 22 to 25 years and a little more than 10% had their ages within the 18 to 21 years age bracket with less than 1% of them having attained an age of 30 years and above. The ages of the trainees suggest that most of them did not enter the CoEs immediately after senior high schools. All the colleges have almost similar entry qualifications (West Africa Senior Secondary School Certificate Examination) because entry qualifications into teacher training colleges are determined by the National Council for Tertiary Education. All the colleges also run the same curriculum hence they undertake the same examination that are externally organized by a mentor university. They also have similar rigor in teaching and learning activities.

Data Analysis

The questionnaire data collected were analyzed using statistical techniques such as simple frequency counts and percentages. Data from the interviews, FGDs, observation, and documents were transcribed and sequentially analyzed. The NVivo software program was used to code and analyze the transcripts. The observation data were coded manually and then categorized into themes that emerged from the data.

Results and Discussion

Preparation for Field Experience: School Observation Visit

As hinted earlier, trainees are expected to make visits to basic schools of their choice to observe the teaching practices of experienced teachers and other school-related activities in preparation for their OCTP. After the observation, the head teacher is expected to provide feedback to the college as evidence that the trainees' actually participated in the program. In the second year of their training, after undergoing studies in subject methodology, colleges conduct the OCTP. Both of these activities (i.e., the school observation and OCTP) are intended to prepare teacher trainees for field experience.

The trainees and their college tutors were asked about their experiences and perception of the school observation visits. Results of FGD with the trainees and individual interviews with their tutors have been presented as cases of each college. In College A, the trainees' responses suggest that the school observation visit was important for their pedagogical training:

> *When I went to do the observation for the first week, the headmaster told me to teach. Meanwhile, when we were going they told us not to teach but when I went the headmaster told me*

to teach so I taught. It was somehow very nervous but it was okay. (Student 3, FGD, College A)

Now when it comes to standing in front of a class, shivering, fears and making mistakes, because I had that experience, I didn't have that problem in the OCTP. (Student 2, FGD, College A)

Trainees were asked to observe teaching in the schools; however, some got the opportunity to teach:

They didn't ask me to teach though, so I realized that at a time there was no teacher in the class so I went there to teach but no one came to supervise me, but the head teacher filled the form and it built my confidence in teaching. (Student 4, FGD, College A)

Similarly, trainees in College B also indicated how the school observation visit helped them learn some classroom skills, and even though they were not expected to teach, some head teachers made them teach:

I taught mathematics "construction." Always the teacher will be there monitoring me since I was new there so after the lesson he will tell me for this one you should have done it this way so it really helped me a lot. (Student 3, FGD, College B)

It helped me a lot because I was asked to teach "Fante" so when I started I did not write the topic on the board so that teacher corrected me. (Student 5, FGD, College B)

On the contrary, some trainees from College C saw a gap between theory and practice when they went on the school visit:

Over there the way we prepare lesson note is different from what we are learning here so you will see the teachers will mark me down. (Student 3, FGD, College C)

There were some form of conflict between what we were being taught and what we also practice. (Student 1, FGD, College C)

The comments from trainees from College C suggest a weak collaboration between the schools of attachment and the training institutions with regard to the complementary role each plays in the development of the trainees' teaching skills. In spite of the important role school observation visits play, in the trainees' view, there was indication that the program seems to be given very little attention by both the schools and the colleges. First, in all the colleges, some of the trainees claimed that there is no mechanism in place in the colleges to find out how the schools of attachment carried out the exercise. Second, there was no supervision and monitoring to check whether the trainees actually participated in the activity, and how they experienced it because their nonparticipation was not noticed and penalized. More

importantly, the trainees did not think the feedback from the head teachers was used by the college. Nevertheless, as preparation for learning about teaching, the school observation visit was to a very large extent thought to be fulfilling its intended purpose.

Preparation for Field Experience: OCTP

The OCTP is conducted in the form of micro/peer teaching sessions to prepare trainees for actual teaching in the off-campus teaching practice, and to give them a firsthand experience in application of knowledge of pedagogical skills in teaching (Akyeampong, 2003). It is usually undertaken on the college campus where trainees deliver lessons to their peers under the supervision of teacher educators. On the average, each college uses a period of at least 3 weeks for the entire exercise. In this study, it was found that College A used 3 weeks while College B used 4 weeks, and College C used a whole semester, showing the lack of uniformity in the conduct of the exercise.

The questionnaire sought information from the trainees about the preparation that the college undertakes prior to the exercise. Responses from trainees in all the three colleges concerning their preparation before OCTP have been presented in Table 1. The responses in Table 1 indicate that more than 80% of trainees in all the colleges affirmed that preparation for teaching both the core (i.e., English Language, Maths, Science, and Social Studies) and elective subjects (any subject of their choice) was adequate. Similarly, majority of the trainees (College A = 78.8%, College B = 81.8%, College C = 82.7%) agreed that as part of the preparation, tutors held demonstration lessons on how to teach the elective subjects: and that, these were adequate. However, a significant minority of trainees in College A (21.2%) did not agree that their tutors' practical demonstration of how to teach elective subjects was adequate. Again, regarding the preparation of lesson notes and Teaching/Learning Materials (TLMs), more than 90% of the trainees in all the colleges thought that they had received adequate preparation. This claim made by the trainees was again echoed in a remark made by a tutor from College A during the interviews:

. . . we train them on how to prepare lesson plans, how every plan should go with materials because we know that at the end of their training they will go to the basic schools and so we introduce them to teaching and learning materials that should correspond to each topic. In assignments, they prepare lesson plans for us to mark, vet and see whether they are trying to do the right thing before even the start of the OCTP. (Tutor 1, College A)

The trainees in College C corroborated the information regarding the training they received in preparation of TLMs in their response:

Table 1. Preparation for OCTP by College.

	College A				College B				College C			
	SA	A	D	SD	SA	A	D	SD	SA	A	D	SD
Preparation for teaching my elective subjects was adequate.	22.2	62.2	13.3	2.2	41.4	52.3	—	6.3	55.6	40.4	3.0	1.0
Preparation for teaching my core subjects was adequate.	30.0	65.6	4.4	—	33.0	63.3	2.8	0.9	51.5	44.4	4.0	—
Tutors' practical demonstration of how to teach elective subjects was adequate.	24.4	54.4	19.3	1.9	37.3	44.5	15.5	2.7	37.8	44.9	14.3	3.1
Tutors' practical demonstration of how to teach core subjects was adequate.	27.8	57.8	11.1	3.3	33.9	56.0	6.4	3.7	45.9	50.0	3.1	1.0
Students are educated on the importance of OCTP.	50.0	43.3	5.6	1.1	64.2	31.2	1.8	2.8	59.6	34.3	4.0	2.0
Training in TLM preparation was adequate.	44.4	41.1	12.2	2.2	51.4	43.1	5.5	—	46.5	48.5	5.1	—
Training in the use of TLM was adequate.	58.4	33.7	6.7	1.1	54.1	39.4	6.4	—	58.8	40.2	1.0	—
Training in lesson notes preparation was adequate.	61.1	36.0	2.2	—	61.8	31.8	5.5	0.9	64.6	33.3	1.0	1.0

Note. SA = strong agree; A = agree; D = disagree; SD = strongly disagree (responses in percentages); TLM = Teaching/Learning Materials; OCTP = on-campus teaching practice.

You will prepare lesson plan on a selected topic. After, you will give it to the supervisor to vet and check mistakes and after, you prepare teaching and learning materials for that lesson. Before you take the TLM to the classroom you have to try it, for example if am going to teach three letter words, I will need a cardboard to write three letter words on it . . . (Student 2, FGD, College C)

These comments from the tutor and the trainees (see also Table 1) reflect a procedural training on how to write lesson plan and its accompanying TLMs, which seems to receive much more attention in the training program than reflection on the use of those procedures. This situation has the tendency of making trainees rely on the set of methods they have been exposed to for all teaching circumstances (Akyeampong & Lewin, 2002; Mulkeen, 2010; Pryor, Akyeampong, Westbrook, & Lussier, 2012). Therefore, in the absence of training in reflective practice, student teachers are unlikely to adopt multiple skills when the particular procedure they have been taught fails in real classrooms.

The trainees in all the colleges, however, expressed some reservations about the training they received in the preparation of TLMs and tutors' demonstration lessons. They pointed out that their resource centers were not well equipped to give them the necessary training they needed for the OCTP, which contrasts with the overwhelming positive response they gave in the questionnaire about the adequacy of TLM preparation. Again, they expressed misgivings about tutors' demonstration lessons, especially in the elective subjects.

Teaching During the OCTP

While observing the trainees' lessons, the areas of interest to the study were the aspects the questionnaire sought information on, which were the stages of the lesson, mastery of subject matter, methods/strategies employed, well prepared teaching and learning materials, their appropriateness and use, classroom management, and lesson evaluation. These were of interest to the study because these were also the areas the teacher educators focused on probably because they might have received much more emphasis in their pedagogy studies (Nguyen, 2009; Yan & He, 2010). Majority (80%) of the lessons observed in College A were taught in identifiable stages/sequences. Nevertheless, the introduction stage of almost 40% of them was not linked to any relevant previous knowledge of the class. Most of the trainees showed deep knowledge of the subjects they taught. In some of the classes, the "pupils" (peers) asked very high order questions to test the content knowledge of the student-teacher, a situation which does not commonly occur in normal classrooms. This observation supports some trainees' view that the OCTP should use real classrooms instead of the college and their peers.

However, in College C, more than 70% of the trainees could not use a variety of teaching strategies in their lesson delivery, as has been indicated earlier. They all relied on the question and answer method of teaching, and TLMs were mostly prepared from cardboards, which about 50% of them could not use at the appropriate time. In the interview data, the students revealed that insufficient funds

Table 2. Tutors' Comments on Aspects of Trainees' Lessons During OCTP by College.

	College A				College B				College C			
	Almost always	Very often	Often	Almost never	Almost always	Very often	Often	Almost never	Almost always	Very often	Often	Almost never
Lesson plan	67.8	15.6	12.2	4.4	74.8	10.8	10.8	3.6	60.6	23.2	12.1	4.0
Mastery of subject matter	55.6	22.2	17.8	4.4	55.9	26.1	15.3	2.7	64.6	28.3	4.0	3.0
Lesson delivery	54.4	23.3	14.4	7.8	67.6	20.7	9.9	1.8	68.7	26.3	4.0	1.0
Appropriateness of TLM	50.0	30.0	13.3	6.7	63.1	23.4	9.9	3.6	69.7	24.2	5.1	1.0
Use of TLM	57.8	24.4	10.0	7.8	67.6	22.5	4.5	5.4	65.7	29.3	4.0	1.0
Classroom management	45.6	31.1	18.9	4.4	60.4	21.6	15.3	2.7	61.6	25.3	12.1	1.0
Lesson evaluation	51.1	21.1	16.7	11.1	57.7	20.7	16.2	5.4	53.5	25.3	17.2	4.0

Source. Field data, 2015, (responses in percentages).
Note. TLM = Teaching/Learning Materials; OCTP = on-campus teaching practice.

accounted for their inability to acquire real or improvised objects. Classroom management was excellent in most of the lessons, and almost all the trainees (90%) evaluated their lessons through oral questions. Generally, in both Colleges A and C, most of the lessons were not interactive and interesting, and class participation was poor. Consequently, the trainees could not introduce any innovative and participatory approaches to make the class interesting, aside the procedures they had been taught to use (Pryor et al., 2012). As such, all the lessons followed similar patterns and therefore appeared monotonous. In College B however, four lessons out of the six were more interactive and practical. Trainees used TLMs appropriately; yet, they could not effectively control the class due to the group work approach they used.

In all the colleges, there was only one tutor-supervisor supervising the teaching of every subject. This can be problematic because aside their knowledge of the general principles of teaching, the teacher-supervisors may be unfamiliar with the variations in the techniques and strategies for teaching different subjects. They all used the same procedure to conduct the OCTP by which prior to the lesson, they vetted the lesson plans of the trainees in their groups. Then after the lesson, they invited comments from the members of the class. Some of the comments included "introduction was not interesting," "her pacing was very slow," "he was talking to the board," "the previous knowledge was not appropriate to the introduction," "the teacher was confident in his delivery." Some of these comments were reinforced by the tutor. Much of tutors' comments were on the preparation and appropriate use of TLMs. Their comments on mastery of subject matter and teaching strategies were also adequate and relevant. In many classes, discussion of the comments was lively, relevant, and informative. However, in some of the lessons, the discussion was passive, mostly coming from the tutor only.

Conduct and Supervision of OCTP

Through the questionnaire, the study also gathered data on tutors' comments on various aspects of trainees' lessons during the OCTP (see Table 2). College B had the majority (74.8%) of trainees who indicated that lecturers' commented on their lesson plans almost always, compared with College A = 67.8% and College C = 60.6%. Furthermore, more than 60% of trainees in Colleges B and C received comments on appropriateness and use of TLMs. A significant minority of trainees in College A indicated they almost never received comments from tutors on their classroom management (4.4%) and lesson evaluation (11.1%), hence the data show that while majority of trainees in Colleges B and C reported to have comments from their tutors almost always on the classroom management and lesson evaluation, few of them reported receiving comments from their tutors on classroom management and lesson evaluation. These seemed to be the most important things for the tutors as regards preparing trainees for teaching. Other things they looked out for were appropriateness of the topic to the class being taught, sequencing the lesson, questioning skills among others. Responses from tutors from all the colleges indicate that preparation and use of TLMs by trainees are very important aspects for teacher educators to look out for during OCTP supervision. With regard to the supervision of OCTP, the tutors explained as follows:

> . . . you should also let them know good questioning skills. You should bring all the students' attention to whatever you are asking. Then the use of the chalkboard, and even the materials that they are using in teaching, because some even go with the material to the class, well prepared nicely, but they use it at the wrong time to reinforce the lesson. (Tutor 3, College C)

> . . . when it comes to teaching performance we see the mastery of the subject area, whether the student has adequate knowledge

Table 3. Trainees' Perception of the OCTP by College.

	College A				College B				College C			
	SA	A	D	SD	SA	A	D	SD	SA	A	D	SD
OCTP is an important training activity.	83.3	12.2	1.1	3.3	80.9	18.2	—	0.9	86.9	13.1	—	—
Time devoted to OCTP is not sufficient.	34.4	43.3	18.9	3.3	37.3	30.0	20.0	12.7	22.4	25.5	31.6	20.4
Tutors are helpful during OCTP.	51.7	39.1	5.7	3.4	65.5	32.7	0.9	0.9	48.5	46.5	4.0	1.0
Tutors are unfriendly during OCTP.	9.0	21.3	37.1	32.6	6.3	10.8	41.4	41.4	5.1	17.2	44.4	33.3
OCTP should be optional for students.	13.3	4.4	16.7	65.6	10.9	4.5	28.2	56.4	7.1	5.1	17.2	70.7

Source. Field data, 2015, SA = strong agree; A = agree; D = disagree; SD = strongly disagree (responses in percentages); OCTP = on-campus teaching practice.

on the subject he's going to teach, the understanding of the subject matter, coverage and relevant in relation to his level of pupils. We look out for have the questioning skills, we look at these areas. So after the lesson or after they have ended, we call all those taught in that particular day. (Tutor 5, College B)

. . . the teaching and learning materials they use, the card, the poster colours and all that, they procure them by themselves that is, with their allowance. (Tutor 1, College A)

The trainees' experiences concurred with the expectations of the tutors as they indicated thus:

. . . in selecting a particular topic you have to take into consideration the teaching/learning material that you will use. In case you do not get the TLM, neither are you going to improvise, so you have to change the topic to one that you can easily attain the TLM. (Trainees' FGD)

These views resonate with our observation of trainees' teaching during the OCTP, which showed that when presenting lessons, they lacked a wide range of professional skills. The possible reasons include insufficient demonstration lessons in some of the subjects as pointed out earlier, and the tutors' emphasis on getting the procedures right without considering different approaches that may work in different situations or contexts (Pryor et al., 2012).

Trainees' Perception of OCTP

The trainees were asked to respond to statements about their perception of the organization and supervision of the OCTP. Their perception about OCTP was generally positive because more than 90% of all trainees in the three colleges responded negatively to the statement that "OCTP should be optional for students," thus reiterating the relevance of the OCTP to the development of their professional skills (see Table 3). It is quite clear from Table 3 that the time devoted to OCTP in the various colleges was inadequate. The differences among

responses from trainees were observed when it came to time devoted for OCTP in each college. Although a reasonable number of trainees in Colleges B (67.3%) and C (47.9%) agreed that time devoted to OCTP was sufficient, majority of trainees in College A (77.7%) agreed that the time was not sufficient. This was not surprising because College A used only 3 weeks to undertake the OCTP exercise.

This finding corroborates some of the data from the FGD with the trainees:

I want more time to be allocated to the topics that are being taught, since some of the topics cannot be taught completely within the given time (i.e., 15 min for each student at the time of data collection). (Student 3, FGD, College A)

Although trainees in College A complained about the insufficient period for conducting OCTP, trainees in College C were worried about the time allocated for each teaching session per trainee during OCTP:

I want more time to be allocated to the topics that are being taught, since some of the topics cannot be taught completely within the given time (thus 15 min for each student for now). (Student 4, FGD, College C)

In both Colleges A and B, many of the trainees did not have enough time to complete a full lesson due to large class sizes. This goes to support what was observed in the lessons during the OCTP, where the trainees were not allotted full lesson periods to teach full lessons. The students attributed the short lesson duration to insufficient time for the OCTP program, which was also attributed to the number of courses students had to take in a particular semester. It must be noted that in the teacher education program, students are required to pass all courses taken in a semester to stay on the program. Moreover, being aware that the scores obtained during the OCTP had no effect on the final grade of a teacher candidate, the students did not attach much importance to the exercise. This situation also concurs with what pertains elsewhere in

Table 4. OCTP Preparation for Off-Campus Teaching Practice by College.

	College A				College B				College C			
	AA	VO	O	AN	AA	VO	O	AN	AA	VO	O	AN
Students are exposed to real classroom experience before OCTP.	30.0	34.4	27.8	7.8	20.9	26.4	34.5	18.2	32.3	26.3	30.3	11.1
Tutors' suggestions during OCTP are relevant for off-campus teaching.	51.7	31.5	15.7	1.1	62.2	27.9	7.2	2.7	52.5	35.4	12.1	–
Tutors' suggestions during OCTP were adequate for off-campus teaching.	36.0	41.6	18.0	4.5	54.1	29.7	15.3	0.9	49.5	35.4	15.2	–
Tutors' responses to trainees' concerns during the OCTP were helpful for off-campus teaching.	48.9	34.1	14.8	2.3	50.5	37.8	10.8	0.9	42.9	44.9	11.2	1.0
Tutors use OCTP assessment marks to address trainees' teaching difficulties.	50.0	31.8	17.0	1.1	51.4	38.5	7.3	2.8	50.5	31.3	17.2	1.0

Source. Field data, 2015, A = almost always; VO = very often; O = often; AN = almost never; OCTP = on-campus teaching practice.

some SSA countries (Mulkeen, 2010). The implication of this finding is that some pedagogical and professional skills that could be developed during the OCTP for consolidation during off-campus teaching practice are not well developed.

This eventually results in trainees' lack of reflective and critical teaching techniques (Makura & Zireva, 2011; Pryor et al., 2012) which could be due to low commitment to OCTP. Table 3 further reveals a significant minority (30.3%) of trainees in College A agreeing that their tutors were not friendly during OCTP, compared with their counterparts in Colleges B (17.1%) and C (22.3%), suggesting that not all teacher educators were seen to act professionally during this important residential training program.

Perception of OCTP as Preparation for Off-Campus Teaching

Trainees were asked to express their views about certain critical activities we knew were essential for the off-campus teaching, and how frequently those activities occurred (see Table 4). It is gratifying to note that altogether, more than 80% of the trainees in all the colleges indicated that they were almost always, very often and often exposed to real classroom experience before the OCTP. The school observation visit which they undertook prior to the OCTP might have accounted for this. As has been observed earlier, according to the trainees, the school observation visits helped them improve their confidence in teaching, exposed them to the different backgrounds of pupils, and the need to use language appropriate to their level. However, a significant minority in College A (7.8%), College B (18.2%), and College C (11.1%) believed they did not get exposure to real classrooms prior to the on- and off-campus teaching practice sessions. A tentative

explanation for this view could be that some trainees did not participate in the school observation visit, as has been highlighted earlier.

Again, more than a third of the trainees in Colleges A (81.8%), B (89.9%), and C (81.9%) agreed that the tutors' suggestions during the OCTP were almost always and very often relevant for their off-campus field experience. These suggestions, according to the trainees, were adequate enough particularly to build their confidence for teaching in real classroom settings, as can be seen from the interviews which explored these further:

> *Suggestions from tutors have improved my experience and confidence in teaching . . . When the tutor realizes you lack confidence they put some measures such as "take your time, relax, start again in a relaxed way" to boost your confidence.* (Student 4, FGD, College B)

> *Personally, it has built my confidence in teaching because I have not taught before so I quite remember when we were having OCTP I was shivering but suggestions and encouragements from the tutor helped me to gain confidence.* (Student 1, FGD, College C)

Quite clearly, trainees found tutors' suggestions and responses during the OCTP very helpful for their field experience. Even though they responded very positively to the question relating to tutors' use of OCTP assessment marks to address their challenges (see Table 4), the FGD indicates that trainees did not seem to know what the scores obtained during the OCTP were used for:

> *For the scores, I personally can't say what the scores are used for but I have heard that when a person goes out of his normal*

supervision due to some reasons, the authorities fall on the scores for the final grade. (Student 3, FGD, College A)

Meanwhile, some tutors said the scores were kept purposely for the college's records, and that the program served as a "warm up" activity to make the students sit up and attach much seriousness to it and eventually, perform effectively during the off-campus teaching practice. In essence, although all the practicum activities that took place as part of the college preparation for field experience were deemed essential and very useful, and therefore were allotted time on the college calendar, none of them had any effect on the final grade of trainees. There is therefore the tendency for trainees to pay little attention to such activities in the residential program.

Conclusion

Generally, the trainees strongly indicated in the questionnaire that all the preparatory activities were very adequate, and there was the feeling that they were very ready to embark on the field experience exercise. Nevertheless, the interviews which revealed some weaknesses in the activities seems to suggest the trainees' exaggeration of the adequacy of the college-based practical activities, as has been found among teacher trainees in Mali, Senegal, Kenya, Uganda, and Tanzania (Akyeampong et al., 2013). Related to this point is the fact that in the three colleges studied, there seemed to be varying degrees of importance given to the preparation given prior to the OCTP, the school observation visits, the duration and conduct of the OCTP. For example, OCTP lessons of trainees in College B were more interactive, practical and trainees' used appropriate TLMs compared with other colleges. Furthermore, trainees in Colleges B and C almost always received comments from tutors compared with trainees in College A. The OCTP which is conducted in the form of microteaching is intended to deepen the teacher trainees' practical knowledge of teaching through guided, practical, professional learning with their peers in the college classrooms. In demonstrating their experience of OCTP, they expressed deep knowledge about the processes involved in preparing to teach. Evidently, the fact that one possesses theoretical and/or practical knowledge about teaching does not in itself, guarantee that the one will necessarily be able to teach effectively. Unsurprisingly, in their microteaching, many of the trainees did not take the teaching sessions seriously because they were teaching their peers and also the activity did not count to their final grade. They also did not demonstrate adequate knowledge about the application of a variety of teaching strategies. They all adhered to the procedures of lesson presentation as though the particular approach they adopted could be applied to all types of children in all real classrooms. It was as if simply possessing knowledge of methods, a laid down set of teaching procedures, TLMs, and a convenient selection of certain strategies were all they needed to teach effectively (Adu-Yeboah, 2011; Yan & He, 2010). As such, they seemed to underestimate the challenges and difficulties of teaching in real classrooms.

Moreover, the timing of the OCTP (as an after-school activity without credit weighting) and the short duration of the exercise have the tendency of downplaying the significant role of the exercise to fully develop the trainees' reflective and critical teaching skills. Being an after-school activity, the OCTP may be viewed as a co-curricular activity and therefore may not attract the maximum participation it requires. This may not augur well for the practical component of the preservice program and may affect the realization of the quality teaching and learning policy agenda (Ministry of Education, 2012) the Ministry of Education envisages to achieve.

Finally, our findings suggest that the OCTP is fulfilling its purpose of exposing trainees to teaching and what they should expect in the off-campus field experience: from lesson notes and TLM preparation to lesson notes vetting, lesson delivery, supervision, and post-lesson discussion. Although they first practice teaching on their peers in the college classroom, the experience is rewarding as it trains them to subject their lesson plans, TLMs, and lesson delivery to critique and thus helps calm their anxieties and build their confidence.

Recommendations

The findings of this study paint a picture of how OCTP is organized in some CoEs in Ghana. The findings also provide lessons that could serve as the basis for rethinking the practical component of the preservice program which is organized within the first 2 years of the residential program of CoEs in Ghana.

At the time of writing this article, the British-funded project, "Transforming Teacher Education and Learning (T-TEL)" has initiated support structures to equip teacher trainees in public CoEs to deliver high quality teaching and learning in basic schools. Of particular relevance to the issues raised in this article is the project's restructuring of the three complementary teaching practice sessions (observation visits, on-campus, and off-campus) with guidelines in the form of handbooks for mentors, trainees, and college tutors to facilitate the implementation of practicum. This is a good move, as it will ensure standardization and harmonization of the practicum activities for all CoEs. However, as with many foreign-initiated projects, when the external support ends, the project phases out, no matter its usefulness. It will therefore be vital for national agencies involved in teacher education activities to collaborate to develop monitoring and support mechanisms for early detection of challenges that will be encountered, for the overall improvement of the activities and their sustainability.

Again, in the colleges, a period should be set aside for trainees to share their experiences of the school visits, and during the OCTP, trainees should be given more

opportunity to engage with and critically interrogate their own practice to make the study of practice and critical inquiry on professional practice important parts of learning to teach (Akyeampong et al., 2013). It will also be essential for the teacher educators to catalog and incorporate the feedback from the practicum activities into the college pedagogical training, as the national agencies also ensure that the newly developed national teaching standards are used to guide the development of professional competencies of teacher trainees in the initial teacher preparation program.

In addition, as part of the preparation for practicum, we suggest that teacher educators should conduct demonstration lessons for trainees to observe firsthand, and from experienced professionals how theories for teaching specific subjects are applied in real/contrived situations. This should be organized before the OCTP is conducted for trainees. Moreover, as much as practicable, some real classrooms should be used for the OCTP to give trainees teaching experience with real pupils/classrooms.

We believe that what we have recommended proffer some workable solutions to the provision of practicum activities which when applied would help produce competent teachers that can bring about change in the low learning achievement of Ghanaian basic school children. Finally, it is fair to point out that as this study is based on a small-scale survey, a rigorous longitudinal study may be needed to understand preservice teachers' entry characteristics, teaching practice skills during training and subsequent practice in schools after training to inform policy and practice.

Appendix A

Questionnaire for Trainees

UNIVERSITY OF CAPE COAST

CENTER FOR RESEARCH ON IMPROVING QUALITY PRIMARY EDUCATION IN GHANA

Questionnaire for Trainees

Dear Respondent,
The Center for Research on Improving Quality of Primary Education in Ghana (CRIQPEG) is conducting a study on how the practical component of the Initial Teacher Education (ITE) in the Colleges of Education prepares trainees for teaching. We would be grateful if you could spend some of your time to respond to this questionnaire. We seek your honest views on your understanding and experiences with the practicum in the ITE program to achieve the study's aims. Your responses will be treated confidentially and will be used for research purposes only. Please, do not write your name on the questionnaire. Thank you.

SECTION A: Bio Data

1. Sex
   M   [ ]   F   [ ]
2. Age range
   18-21   [ ]
   22-25   [ ]
   26-29   [ ]
   30 and above   [ ]
3. Highest academic qualification at start of training:
   WASSCE/SSCE   [ ]
   GCE O' Level   [ ]
   GCE A' LEVEL   [ ]
   HND   [ ]

   Others (specify): …………………………………………………………………………………

4. Years of teaching experience at start of training: _____yrs

5. Is teaching your first career choice?   Yes   [ ]   No   [ ]

6. If your answer to question 5) is no, what was your first career choice?

   ………………………………………………………………………………………….

7. Have you participated in school observation visits since you started your training?

          Yes   [ ]   No   [ ]

8. If your answer to question 7) is yes, for how many weeks did you do the observation visits?

……………………………………………………………………………………………

SECTION B: Trainees' Preparation for OCTP

No	Item	Strongly agree	Agree	Disagree	Strongly disagree
9.	Preparation for teaching my elective subjects was adequate.				
10.	Preparation for teaching my core subjects was adequate.				
11.	Tutors' practical demonstration of how to teach elective subjects was adequate.				
12.	Tutors' practical demonstration of how to teach core subjects was adequate.				
13.	Students are educated on the importance of OCTP.				
14.	Training in TLM preparation was adequate.				
15.	Training in the use of TLM was adequate.				
16.	Training in lesson notes preparation was adequate.				

SECTION C: OCTP as Preparation for Off-Campus Teaching

No	Item	Almost always	Very often	Often	Almost never
17.	Students are exposed to real classroom experience before OCTP.				
18.	Tutors' suggestions during OCTP are relevant for off-campus teaching.				
19.	Tutors' suggestions during OCTP were adequate for off-campus teaching.				
20.	Tutors' responses to trainees' concerns during the OCTP were helpful for off-campus teaching.				
21.	Tutors use OCTP assessment marks to address trainees' teaching difficulties.				

22. Generally, how will you rate your experience of the OCTP? Tick only one box.

     Very useful   [ ]   Useful   [ ]   Quite useful   [ ]   Not useful   [ ]

SECTION D: Conduct and Supervision of OCTP

23. How many times did you teach in the OCTP? ……………. times.
24. What was the duration of the entire OCTP program? ……………. weeks.
25. State the number of times you taught the subjects listed below during the OCTP, the duration and the classes.

Subjects	No. of times taught	Class	For how many minutes
English			
Maths			
Science			
Environmental and social studies			
Electives (please state)			

26. How regularly do tutors give comments on the following during OCTP? (please tick each box)

No.	Item	Almost always	Very often	Often	Almost never
	Lesson plan				
	Mastery of subject matter				
	Lesson delivery				
	Appropriateness of TLM				
	Use of TLM				
	Classroom management				
	Lesson evaluation				

27. How often do tutors assess/score your teaching during OCTP?
Almost always   [ ]   Very often [ ]   Often [ ]   Almost never [ ]

SECTION E: Trainees' Perception of the OCTP

No.	Item	Strongly agree	Agree	Disagree	Strongly disagree
28.	OCTP is an important training activity.				
29.	Time devoted to OCTP is not sufficient.				
30.	Tutors are helpful during OCTP.				
31.	Tutors are unfriendly during OCTP.				
32.	OCTP should be optional for students.				

33. What do you want to see done differently during OCTP?
    ……………………………………………………………………………………………….
    ……………………………………………………………………………………………….
    ……………………………………………………………………………………………….

Appendix B

Observation Checklist

UNIVERSITY OF CAPE COAST

CENTER FOR RESEARCH ON IMPROVING QUALITY PRIMARY EDUCATION IN GHANA

Observation Checklist

1. Name of College: ……………………………………………………………………………….
2. Number of students in a group/class …………… ……………………………………… … .
3. Number of tutors assigned to a group/class/session ……………………………………………….
4. Duration of each session of OCTP ……………………………………………… ………………
5. How many students taught during one session? ……………………………………………… …
6. For how many minutes did each student teach, on average? ………………………………………
7. Which subjects were taught during the period of observation? ……………………………………
8. Which classes were students made to teach? ……………………………………………… … ……………….

Date: …………………………………………… … ………………………………….
Time: ……………………………………………… ……………………….
Subject taught: ………………………………………… …………………….

Duration: ………………………………………………… … ……………………

Trainee's lesson

Indicate how the trainee measures up to the areas listed below:

No.	Item	Excellent (5)	Good (4)	Average (3)	Below average (2)	Weak (1)	Absent (0)
1.	Lesson taught in stages/sequence						
2.	Mastery of subject matter						
3.	Variety of methods/strategies employed in lesson delivery						
4.	Well prepared TLM						
5.	Appropriateness of TLM to lesson						
6.	Use of TLM						
7.	Classroom management						
8.	Lesson evaluation						

Tutors' comments

Indicate the degree to which tutors commented on the areas listed below:

No.	Item	Excellent (5)	Good (4)	Average (3)	Below average (2)	Weak (1)	Absent (0)
9.	Lesson plan						
10.	Stages of the lesson						
11.	Mastery of subject matter						
12.	Methods/strategies employed						
13.	Lesson delivery						
14.	How TLM was prepared						
15.	Appropriateness of TLM						
16.	Use of TLM						
17.	Classroom management						
18.	Lesson evaluation						

19. Were tutors' comments adequate? Yes [ ]   No [ ]   Sometimes   [ ]
20. Were tutors' comments relevant? Yes [ ]   No [ ]   Sometimes   [ ]
21. Did tutors score the lesson? Yes [ ]   No [ ]   Sometimes   [ ]
22. Were comments given after each student had taught? Yes [ ] No [ ] Sometimes [ ]
23. Were students given the opportunity to comment on their peers' teaching?

     Yes [ ]   No [ ]   Sometimes [ ]
24. What was the general atmosphere during post-teaching discussion?
     Lively? Tense? Collegial? (describe)

Appendix C

Trainees Interview Schedule

UNIVERSITY OF CAPE COAST

CENTER FOR RESEARCH ON IMPROVING QUALITY PRIMARY EDUCATION IN GHANA

Interview schedule for trainees

About microteaching

(First, explain the purpose of the interaction: that is, to find out their experience of microteaching)

1. Can you tell me what you know about microteaching?
2. For how many weeks was it conducted?
3. How many times did you teach during the exercise?
4. What subjects did you teach?
5. Which classes did you prepare to teach?
6. Were you allowed to choose your own subjects? How did you come by those subjects?
7. Were you allowed to choose your own classes? How did you come by the classes you taught?
8. What preparations did you make before teaching? (probe for lesson notes preparation, TLM preparation, use of basic school curriculum materials, etc.)
9. Did you get any form of assistance during your preparation?
10. What kind of assistance? From whom?
11. What do you want to see improved in the assistance provided you during the preparation for microteaching?

During microteaching

12. How would you describe your experience of microteaching? Has it built your confidence adequately for teaching?

13. How has the microteaching helped improve the following areas of your professional training?

9. Mastery of subject matter
10. Strategies/methods employed to aid pupils' understanding
11. Lesson delivery
12. Preparation of TLM
13. Use of TLM
14. Class management
15. Lesson evaluation

14. Can you describe how supervision of microteaching was done? Were the comments valid? Was supervision adequate?

15. How would you describe tutors' supervision of subjects outside their area of specialization?

16. What do you want to see improved in the supervision of microteaching?

After microteaching

17. In what ways did the microteaching experience help you improve your knowledge and practice of teaching?

18. Overall, would you say your experience of microteaching is good preparation for your field experience/off-campus teaching?

19. What do you want to see done differently in the conduct of microteaching?

Appendix D

Tutors Interview Schedule

UNIVERSITY OF CAPE COAST

CENTER FOR RESEARCH ON IMPROVING QUALITY PRIMARY EDUCATION IN GHANA

Interview schedule for college tutors

Preparation for microteaching

(First, explain the purpose of the interaction: that is, to find out about the conduct of microteaching and field experience)

1. Can you tell me what you know about the microteaching organized by your college?
2. What kind of preparation goes on before the conduct of microteaching?
3. For how many weeks is it conducted?
4. How many tutors are assigned to each class at a time?
5. How many times do students teach during the exercise?
6. What subjects do they teach?
7. What classes do they teach?
8. Are they allowed to choose their own subjects? How do they come by the subjects they teach?
9. Are they allowed to choose their own classes? How do they come by the classes they teach?
10. What preparations are they expected to make before teaching? (probe for lesson notes preparation, TLM preparation, use of basic school curriculum materials, etc.)
11. Do students obtain any form of assistance during their preparation?
12. What kind of assistance? From whom?
13. What do you want to see improved in the assistance provided to students during preparation for microteaching?

Supervision of microteaching

14. How is supervision of microteaching arranged and carried out?
    a. Find out if there was any orientation exercise for tutors on what they should look for during supervision/any guidelines before the exercise.
    b. Probe for how tutors manage to supervise other subjects outside their area of specialization.
15. What do you look for when supervising students' teaching during microteaching?
16. Do you score students' teaching during microteaching? If yes, what are the scores used for?
17. What do you want to see improved in the supervision of microteaching?

After microteaching

18. How is microteaching used to improve students' knowledge and practice?
19. Overall, would you say the students' experience of microteaching is enough preparation for their field experience/off-campus teaching? Why?
20. What do you want to see done differently in the conduct of microteaching?

ORCID iD

Christopher Yaw Kwaah [ID] https://orcid.org/0000-0002-4890-9761

References

Adu-Yeboah, C. (2010). *Teacher preparation and continuing professional development in Africa (TPA). Learning to teach reading and mathematics and its influence on practice in Ghana* (Country report). Brighton, Sussex.

Adu-Yeboah, C. (2011, May 1-5). *Inside the black box of learning to teach primary English and maths in Kenya and Ghana*. Paper presented at the 55th Annual Conference of the Comparative and International Education Society (CIES), Montreal, Québec, Canada.

Akyeampong, A. K., & Lewin, K. M. (2002). From student teachers to newly qualified teachers in Ghana: Insight into becoming a teacher. *International Journal of Educational Development*, *22*, 339-352. doi:10.1016/S0738-0593(01)00059-1

Akyeampong, K. (2003). *Teacher training in Ghana-Does it count?* DFID Researching the Issues 49b. London: DFID.

Akyeampong, A. K., Lussier, K., Pryor, J., & Westbrook, J. (2013). Improving teaching and learning of basic maths and reading in Africa: Does teacher preparation count? *International Journal of Educational Development*, *33*, 272-282. https://doi.org/10.1016/j.ijedudev.2012.09.006

Akyeampong, A. K., & Stephens, D. (2002). Exploring the backgrounds and shaping of beginning student teachers in Ghana: Toward greater contextualisation of teacher education. *International Journal of Educational Development*, *22*, 261-274. doi:10.1016/S0738-0593(01)00064-5

Akyeampong, K., Pryor, J., & Ampiah, J. G. (2006). A vision of successful schooling: Ghanaian teachers' understandings of learning, teaching and assessment. *Comparative Education*, *42*, 155-176.

Bilen, K. (2015). Effect of micro teaching technique on teacher candidates' beliefs regarding mathematics teaching. *Procedia: Social and Behavioral Sciences*, *174*, 609-616. doi:10.1016/j.sbspro.2015.01.590

Brouwer, N., & Korthagen, F. (2005). Can teacher education make a difference? *American Educational Research Journal*, *42*, 153-224. doi:10.3102/00028312042001153

Cetin, S. (2013). Development of a scale to measure prospective teachers' self-efficacy beliefs regarding classroom management. *Turkish Studies*, *8*, 299-310.

Darling-Hammond, L. (2005). Constructing 21st-century teacher education. *Journal of Teacher Education*, *57*, 300-314.

Hascher, T., Cocard, Y., & Moser, P. (2004). Forget about theory-practice is all? Student teachers' learning in practicum. *Teachers and Teaching: Theory and Practice*, *10*, 623-637. doi:10.1080/1354060042000304800

Institute of Education. (2005). *Three-year diploma in basic education: Five-semester programme (Revised syllabus)*. Cape Coast, Ghana: University of Cape Coast.

Jones, M. (2000). Trainee teachers' perceptions of school-based training in England and Germany with Regard to their preparation for teaching, mentor support and assessment. *Mentoring & Tutoring: Partnership in Learning*, *8*, 63-80. doi:10.1080/713685509

Kilic, A. (2010). Learner-centered micro teaching in teacher education. *International Journal of Instruction*, *3*, 77-100.

Lauwerier, T., & Akkari, A. (2015). *Teachers and the quality of basic education in Sub-Saharan Africa* (ERF Working Papers Series No. 11). Paris, France: UNESCO Education Research and Foresight.

Lonergran, N., & Anderson, L. W. (1988). Field-based education: Some theoretical consideration. *Higher Education Research & Development*, *7*, 63-77.

Makura, A. H., & Zireva, D. (2011). School heads and mentors in cahoots? Challenges to teaching practice in Zimbabwean teacher education programmes. *Journal of Sexual Aggression*, *19*, 3-16. doi:10.1080/13552600.2011.573583

Ministry of Education. (1993). *National commission on teacher education in Ghana*. Accra, Ghana: Author.

Ministry of Education. (2012, May). *Education Sector Performance Report*. Accra: Ministry of Education.

Mulkeen, A. (2010). *Teachers in anglophone Africa: Issues in teacher supply, training, and management*. Washington, DC: The World Bank. doi:10.1596/978-0-8213-8053-6

Nguyen, H. T. (2009). An inquiry-based practicum model: What knowledge, practices, and relationships typify empowering teaching and learning experiences for student teachers, cooperating teachers and college supervision. *Teaching and Teacher Education*, *25*, 655-662. doi:10.1016/j.tate.2008.10.001

Parr, G., Wilson, J., Godinho, S., & Longaretti, L. (2004). Improving pre-service teacher learning through peer teaching: Process, people and product. *Mentoring & Tutoring: Partnership in Learning*, *12*, 187-203. doi:10.1080/1361126042000239938

Pryor, J., Akyeampong, K., Westbrook, J., & Lussier, K. (2012). Rethinking teacher preparation and professional development in Africa: An analysis of the curriculum of teacher education in the teaching of early reading and mathematics. *Curriculum Journal*, *23*, 409-502. doi:10.1080/09585176.2012.747725

Pontefract, C., & Hardman, F. C. (2005). The discourse of classroom interaction in Kenyan primary schools. *Comaparative Education*, *41*, 87-106.

Schweisfurth, M. (2015). Learner-centred pedagogy: Toward a post-2015 agenda for teaching and learning. *International Journal of Educational Development*, *40*, 259-266. doi:10.1016/j.ijedudev.2014.10.011

Sen, A. I. (2010). Effects of peer teaching and microteaching on teaching skills of pre-service physics teachers. *Education and Science*, *35*(155), 78-88.

Westbrook, J., Brown, R., Pryor, J., & Salvi, F. (2013, December). *Pedagogy, curriculum, teaching practices and teacher education in developing countries*. Final Report. Education Rigorous Literature Review. London: Department for International Development.

Yan, C. M., & He, C. J. (2010). Transforming the existing model of teaching practicum: A study of Chinese EFL student teach-

ers' perceptions. *Journal of Education for Teaching*, *36*, 57-73. doi:10.1080/02607470903462065

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, *61*, 89-99.

Author Biographies

Christine Adu-Yeboah holds an international professional doctorate in Education from the University of Sussex, UK. She is an associate professor in Higher Education and Teacher Education, and lectures at the Institute of Education, University of Cape Coast. Her research interest is in English language education, teacher education, equity, quality and access issues in education and gender in higher education. She is currently the vice dean of the School for Educational Development and Outreach in the College of Education Studies, University of Cape Coast, Ghana.

Christopher Yaw Kwaah holds a PhD in Curriculum and Teaching and a research fellow at the Centre for Educational Research, Evaluation and Development in College of Education Studies in the University of Cape Coast, Ghana. His research interests include teacher education, curriculum development and evaluation and higher education. He has recently co-authored a book chapter by Bloomsbury on *Continuing professional development of teachers in Sub-Saharan Africa: Challenges and prospects*.