Teacher Education in Ghana: Policies and Practices

Isaac Buabeng^{1,*}, Forster Danso Ntow² & Charles Deodat Otami³

1,2Department of Basic Education, University of Cape Coast, Ghana

³Department of Science Education, University of Cape Coast, Ghana

*Correspondence: Department of Basic Education, University of Cape Coast, Ghana. E-mail: ibuabeng@ucc.edu.gh

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Abstract

This article focuses on teacher education in Ghana. It examines a number of reforms involving curricular changes and restructuring of teacher education institutions tasked with the responsibility of preparing teachers for the basic school level. The article highlights the structure and changes in Ghana's teacher development policies and practices following the adoption of a new programme which took effect in 2018 with the intake of the first batch of 4-year degree students in the country's Colleges of Education. We envisage that improved teacher qualification and a conscious effort to link theory to practice will result in improved teacher knowledge and skills required for a professional teacher. Despite this stated enthusiasm, a number of contextual issues which could negatively affect the intended gains from this most current reforms have been discussed. We end with a call on policy makers to address the contextual issues highlighted in this paper and also a need for continuity in teacher education policies in Ghana considering the numerous politically-related reforms.

Keywords: teacher education, educational reforms, teaching and learning, teacher effectiveness

1. Introduction

Teacher education issues continue to receive much attention in the literature. One major reason for this has been the belief that students' learning outcomes, especially those from underprivileged and underserved communities are significantly influenced by their teachers. Such outcomes hinge on the educational quality and the efficiency of the educational system (Archibald, 2006; Darling-Hammond & Baratz-Snowden, 2005). As a result, we argue, that the educational system of any nation serves as a mirror through which the image of its future can be seen and shaped because it is from the school systems that the workforce of the nation are obtained. Therefore, Ghana's quest at becoming an industrialised country depends on the quality of its citizens who are a product of its educational system. It may not be farfetched to appreciate why the country has undertaken a number of teacher education reforms within the last few decades.

In Ghana, the vision of pre-tertiary teacher education programme is to "prepare teachers to enable them function in the basic and second cycle schools and to develop and nurture them to become reflective and proficient practitioners capable of providing quality education for Ghanaian children" (Ministry of Education [MOE], 2012, p. 8). This statement and several others in the past have led to a number of reforms involving curricular changes and restructuring of teacher education institutions tasked with the responsibility of preparing teachers for the early grades to the senior high school levels. In spite of the numerous teacher education reforms (elaborated later) that Ghana has experienced, the quality of teaching and learning leaves a lot to be desired due to a myriad of factors such lack of policy coherence, mismatch between expectations as espoused in official policy documents and what is possible within a constrained school system among others. (MoE). This article, therefore, takes a look at the policies and practices that were put in place to prepare individuals to teach and ends with the current teacher education reforms efforts which are aimed at preparing teachers with the requisite teaching competencies to respond to the changing needs of Ghana. In the next section, we provide a brief context of teacher education in Ghana for the basic school system (KG to Grade 9) highlighting some concerns with these models.

1.1 Context of Pre-tertiary Education in Ghana

In Ghana, pre-tertiary education comprises the basic school level (at the moment, involves kindergarten, primary and

junior high schools), the second cycle level (senior high school, technical/vocational institutions) and special schools. The preparation of teachers to teach at the basic school level takes place in post-secondary institutions known as the College of Education (CoE). Currently, there are 48 Colleges of Education (CoE) in Ghana, up from 38 in 2014. The increase is due to the government absorbing 10 private CoE with the aim of expanding the infrastructural facilities in the colleges. These CoE, prior to the current reforms which began in 2014, offered three-year Diploma in Basic Education (DBE) programmes. However, there are also two universities (University of Cape Coast and University of Education, Winneba) which are traditional teacher education institutions with the mandate to prepare teachers to teach at various educational levels including at the basic schools. Notwithstanding this, some graduates, who are not prepared to teach, from other universities find their way to the classroom to teach at either the primary, junior high, or senior high schools. The subsequent paragraphs provide further details on the categories of the teachers in the pre-tertiary schools.

All teachers in the pre-tertiary education sector are categorised into professional and non-professional teachers (MoE, 2012). The minimum teaching qualification of professional teachers for basic school level had been the Diploma in Basic Education obtained from an accredited higher educational institution for training teachers, i.e. CoE. The minimum teaching qualification of professional teachers for second cycle level is a Bachelor's degree in Education designed in the appropriate subject(s) for that level, or a BA/BSc (in a teaching subject) in addition to a post-graduate diploma in education (PGDE) or its equivalent.

The non-professional teachers are categorized into two: persons holding the Senior High School (SHS) certificate with three credits including English and mathematics and persons with diploma from accredited polytechnics (now technical universities) and university graduates without certificate in education (MoE, 2012). This situation raises concerns about the professionalism of teaching in Ghana considering that any graduate with any academic qualification can be employed to teach.

Also, there are various pathways that an individual can use to enter the teaching profession as follows:

1. Three-year Diploma in Basic Education (DBE). Accredited Colleges of Education (CoE) are responsible for the training of these teachers. Teachers from the CoE teach at the basic school level.

2. Two-year post-DBE (for basic school teachers). The programme is designed for teachers who already possess the DBE. These teachers get trained from the University of Cape Coast or University of Education, Winneba. Such training is mostly voluntary as at the time teachers were not required to obtain a Bachelors to teach at the basic school level.

3. Four-year bachelor's degree (for both basic and second cycle schools). These are graduates from mostly the University of Cape Coast and University of Education, Winneba. That is, while the CoE prepared teachers who graduated with a DBE to teach at the basic school level, the two traditional teaching universities offered degree programmes for prospective teachers at this level.

4. Two-year DBE (sandwich) program for teachers who already possess initial professional teacher's Certificate "A" 3-Year post-secondary qualification. This is offered through the CoE by the University of Cape Coast.

5. Our-year (distance education) Untrained Teacher's Diploma in Basic Education (UTDBE) for practicing teachers who have not received initial professional teacher training (non-professional teachers with senior high school certificate). This programme is offered in the CoE in partnership with the Teacher Education Division (TED) of the Ghana Education Service as an ad hoc measure to increase teacher numbers to handle basic schools especially in rural communities (Asare & Nti, 2014).

From the foregoing, teacher education in Ghana has different pathways. This has led to a number of criticisms of the system. The first criticism has to do with the mode of delivery which has been described as "following traditional teacher education programme" (Anamuah-Mensah & Benneh, as cited by Asare & Nti, 2014, p.3). A second criticism has to do with the lack of a common framework to prepare teachers with since the curricular followed in these institutions tended to be varied in nature. For example, apart from the CoE which follow a common curriculum developed by the Institute of Education the other pathways follow different curricular. For instance, while the CoE provide a yearlong school-based teaching practice in addition to a semester long campus-based peer teaching, their colleagues offering an education degree in the University of Cape Coast (UCC) engage in a semester long school-based teaching experience. Such variations can have implications on the learning experiences of prospective teachers such as ability to cope with the complexities of teaching thereby minimising the reported challenges beginning teachers face in schools. As such, while the differences in curricular, CoE versus universities, are good for innovations in teacher education, it can also lead to very different teachers being produced based upon the

instructional philosophies of the various institutions and whether or not such ideas are in tandem with the national aspirations in terms the 'kind' of teacher required to teach at the basic school level. Additionally, the fact that individuals with senior high school certificate can be employed to teach raises concerns about the quality of teaching and learning across the country and also the image of teaching.

In summary, the different pathways to teaching in Ghana raise a number of concerns such as: 1) With the teacher education institutions using different curricular in preparing teachers to teach, are the competencies and knowledge being acquired by the graduates of these institutions comparable? 2) Are these curricular such that they confirm with a national vision of who a 'good' teacher is, assuming such a vision exists? 3) Can there be a national consensus on criteria on quality teacher indicators without sacrificing academic freedom to innovate? In the next section, we focus on various teacher education reforms carried out in Ghana.

1.2 Teacher Education Reforms in Ghana

Teacher education reform initiatives in Ghana have largely been influenced by socio-political changes. That is, nearly every political party that has ruled the country since independence has engaged in some form of teacher education reforms which were aimed at preparing qualified teachers to meet the educational needs of the country. These reforms have produced different sets of teachers with different types of certificates (Anamuah-Mensah, 2006). Teacher Training Colleges (TTC), now known as Colleges of Education, initially offered 2-year Post-Middle Certificate "B" programs, followed by 4-year Post-Middle Certificate "A" and 2-year Post-Secondary Certificate "A" programmes. In the 1980s, the 2-year Post-Secondary programme was extended to a 3-year program, but ran alongside the 4-year certificate "A" programs until it was truncated (Newman, n.d.). However, the reforms yielded little impact on students' learning outcomes (MoE, 2012) such as achievement and development of critical values like problem solving. In recent times, there have been two pieces of major legislation related to teacher education preparation which are aimed at transforming the country's educational system.

The first legislation is the passing of the 2008 Education Act (Act 778). Under the Act, Section 9 called for the creation of a National Teacher Council (NTC) which has since been established. The NTC is mandated to establish professional practices and ethical standards for teachers and teaching, and registration and licensing of individual seeking to enter the teaching profession. The Act also empowers the NTC to withdraw the license of any teacher who misconducts him/herself and does not adhere to the professional code of ethics governing the teaching profession in Ghana. As such, ACT 778 is focused on making teaching in Ghana a profession with clear codes of ethics and minimum acceptable competencies of those who get to teach at the pre-tertiary institutions in the country.

The second legislation is the Colleges of Education Act 847 to upgrade CoE into tertiary institutions. Following this legislation and with effect from October, 2018 the CoE were upgraded to four-year degree awarding institutions and no longer three-year diploma awarding Colleges. Prior to the enactment and passage of Act 847, the CoE were designated as TTC and were under the supervision of the Ghana Education Service, the body responsible for pre-tertiary teacher education. The passage of the Colleges of Education Act 2012, Act 847 has provided legal backing to their new elevated status. The colleges have since been under the National Council for Tertiary Education (NCTE). The NCTE is a government body responsible for the regulation of tertiary education institutions in Ghana.

2. Teacher Preparation Programme Design

Prior to the implementation of the current teacher education reforms in 2019, the preparation of pre-service teachers for the basic school level followed a dual mode where both content and methodological courses were taken within the stipulated period of the programme. In this structure, prospective teachers took a number of content courses as well as the pedagogical courses concurrently. Also, the structure allowed for three types of prospective teachers – the generalist, who are trained to teach all subjects at the elementary level (grades 1 to 6); early childhood educators and the specialist teachers who are usually at the JHS. The model of teacher development is shown in Figure 1.

Irrespective of the type of teacher to be produced, the programme design had four features. They are; 1) a number of content courses related to the subjects to be taught at the basic school; 2) methodology courses to equip prospective teachers with instructional skills to be able to handle various topics in the basic school curriculum and at a grade for which they are been prepared to teach; 3) practicum (teaching experience) which comes in two phases. The first phase; often referred to as on-campus teaching practice requires prospective teachers to engage in peer teaching on their campuses for a semester. This peer teaching is done under the supervision of tutors on the various CoE campuses who are subject specialists. An assumption underlying this phase is to provide opportunity for the prospective teacher to teach in a familiar environment thereby boosting their self-confidence as teachers. Also, this

phase allows the tutors to reinforce what has been taught in the various courses (i.e. content, methodology, psychology and curriculum) through the feedback they provide and also enable the prospective teachers modify/develop some professional competencies before going into the basic schools.



Figure 1. The Phases of Teacher Development Model

The second phase, commonly referred to as off-campus teaching practice or field experience, offers prospective teachers the opportunity to teach in a real classroom with all its complexities. During this phase, prospective teachers are supervised by tutors from their college as well as experienced teachers of their placement schools. It is anticipated that when prospective teachers go through this model of teacher development, they would acquire deep knowledge of the content in the various subject areas, become well-versed in methodology and also skilfully integrate content knowledge acquired and the pedagogical knowledge for classroom instruction. The fourth feature requires prospective teachers to take courses in literacy studies in areas such as English, Information Literacy, Computing and a Ghanaian language (mostly informed by the location of the College).

From the foregoing, it can be inferred that the Diploma in Basic Education programme covered all the essential knowledge and skills that a teacher requires to teach. However, there have been criticisms aimed at the minimum entry qualification of a Diploma to teach (compared to most countries in the world which requires a minimum of a First degree) and its attendant inadequate content considering the credit requirement for the award of a Diploma. This begs the question, so where do we go from here?

3. Teacher Preparation and Students' Achievement: What should be included in the Teacher Education Programme?

Educational underachievement has been associated with many factors, for example, socioeconomic and language background factors. However, there is increasing evidence to suggest that teacher and teaching quality is a prevailing predictor of students' achievement (Darling-Hammond, 2000, 2006; Darling-Hammond & Baratz-Snowden, 2005; Ell & Grudnoff, 2013; International Association for the Evaluation of Educational Achievement [IEA], 2012). Over the years, researchers have defined quality teachers as being those who form effective learning relationships with

students and teach in culturally appropriate and responsive ways, and are able to overcome all other influences on student achievement (Ell & Grudnoff). The authors, based on their findings, commented that to improve student achievement and/or eliminate under achievement, the quality of teaching should be improved.

In order to improve the quality of teaching, Darling-Hammond and Baratz-Snowden (2005) outlined three general intersecting areas of knowledge that beginning teachers must acquire, and this has implications for what is included in initial teacher education programmes. Firstly, knowledge of learners and how they learn and develop within a social context; secondly, understanding the subject matter and curriculum goals (skill to be taught) in light of the social purposes of education; and thirdly, understanding the teaching in light of the content and learners to be taught, as informed by assessment and supported by a productive classroom environment (Darling-Hammond & Baratz-Snowden, p. 5).

The need to provide relevant knowledge and understandings that are contextually and pedagogically appropriate is indispensable (Bailey et al., 2011; Loughran, Berry, & Mulhall, 2012). Teacher education programmes should reflect what is known about learning and teaching. Since the most important aim of education is to promote student learning, theories and ideas about learning and their application to teaching practice should be an essential part of any teacher education programme (Darling-Hammond & Bransford, 2005). The evolving concept of learning has moved from reinforcement of positive learning behaviours and information processing to more active ways by which learners can make sense of new knowledge using socially mediated or negotiated ways of learning can be explored in terms of developing teachers' adaptive expertise (Conner & Sliwka, 2014). For the above objectives to be achieved, Darling-Hammond (2006) described three important components that teacher education providers should be concerned with. These are: tight coherence and integration among papers and between coursework and practicum teaching work in schools; extensive and intensively supervised teaching work integrated with coursework using pedagogies that link theory and practice; and closer, proactive relationships with schools that serve diverse learners effectively and develop and model good teaching (p. 300). She contends that schools of education have to design programmes to help prospective teachers to understand teaching and learning so that they can enact these understandings in the classroom.

Though the Ghana education system is attending well to the qualities (developing understandings of the teaching and learning processes), the issue of coherence and integration remains a challenge for teacher education providers Ghana. There is no specific agreement about the core content (subject matter knowledge) amongst the different providers and the organisational and teaching arrangements for student learning experiences. Teacher educators continue to have divided opinions over these matters.

International studies about effective approaches to teaching and learning, such as findings from the OECD Innovative Learning Environments (ILE) Project (Organisation for Economic Co-operation and Development [OECD], 2013) mean that adjustments to teacher education are required to accommodate the needs of today's learners and what we know makes a difference to learning. Recently, Conner and Sliwka (2014) indicated the implications of the ILE work for initial teacher education. The authors argued that initial teacher education should adhere to the "seven transversal learning principles" (pp. 165-166) if prospective teachers are to be effective in their learning environments in which they will be expected to teach.

As indicated earlier that a change in ruling party has often led to some teacher education, the recent change in governance in 2016 provided another opportunity to review and reform the educational system including teacher preparation. A significant change has been the upgrade of existing Diploma-awarding CoE into 4-year degree awarding institutions. This move provided an opportunity to overhaul both the structure and content of the country's teacher education programmes. Issues such as those raised by Darling-Hammond and Baratz-Snowden (2005) can be critically reflected on in the design of the most recent efforts at teacher education in Ghana. Issues such as what subject matter content knowledge is needed by a basic education teacher, how to bridge the gap between theory and practice with its attendant apprenticeship of observation (Lortie, 1975) and developing better relationships between teacher education institutions and placement of schools need to be attended to. Thus, significant changes are imminent in the initial teacher education programmes in Ghana.

4. Proposed Changes in the Teacher Education Programme

Concerns have been raised about the quality of teaching taking place in the Ghanaian classrooms as mirrored in persistent and continuous underachievement of pupils in the basic education system (MoE, 2017). In view of this, the Government of Ghana through the Ministry of Education in collaboration with UKAid initiated a project called

Transforming Teacher Education and Learning (T-TEL). The aim of the project is to "transform the delivery of pre-service teacher education in Ghana by improving the quality of teaching and learning through support to all public Colleges of Education". This has led to a development of National Teacher Education Curriculum Framework (NTECF) and National Teachers' Standards (NTS) to guide the development of teacher education programme across the country and also set minimum professional competencies in the teaching profession. These two documents, NTECF and NTS, are expected to be used in developing new curricular to replace the current curriculum which has been in place for nearly two decades. Such a move addresses a criticism raised earlier about lack of commonality in the preparation of prospective teachers in the various teacher education systems due to the use of varied curricular and philosophies underpinning these programmes.

The NTECF has four pillars constituting the knowledge leading to the initial teacher qualification. The proposed weightings for the four pillars are shown in Table 1. Although they appear as distinct knowledge bases, there is an implicit understanding that these pillars are integrated to prevent any fragmentation in knowledge (Britzman, 1991).

Pillar	Proposed p	Proposed percentage of credit hours			
	K-P3	P4-6	JHS	SHS	
Subject and curriculum Knowledge	25	25	40	60	
Pedagogic Knowledge	25	25	20	18	
Literacy Studies: Ghanaian Languages and English	20	20	10	5	
Supported Teaching in School	30	30	30	17	
Total	100	100	100	100	

Table 1. Proposed Weighting for the Four Pillars of Initial Teacher Education

Source: MoE (2017)

The NTECF is expected to be practice-focused with 30% of the total assessment marks being related to practical assessments of teaching competences. Also, it will focus on ensuring that teachers are confident in the use of learner-centered approaches, including use of ICT, to encourage critical thinking and problem solving. Teaching practice in schools (supported teaching in the language of the new curriculum), will play a central part in the learning process with student-teachers spending time in partner schools in years 1, 2, 3 and 4, not just in Year 3 as is the case with the current Diploma. The literacy studies in Table 1 covers Ghanaian languages, English and French. Although Ghana is a multilingual country with 86 spoken languages and dialects, nine of the languages are taught as subjects in schools. In addition, French and Arabic are taught as foreign languages. Students have the option to major and/or minor in any of the languages taught in the schools. The NTS provides a set of expectations that should inform all those involved in teacher education and teachers (pre-service and in-service) about the knowledge-based teachers should possess what they should do with the various knowledge-types and the values to be exhibited both in school and the larger community. The NTS has the following philosophy:

Teacher education in Ghana aims to prepare teachers imbued with professional skills, attitudes and values as well as the spirit of inquiry, innovation and creativity that will enable them to adopt to changing conditions; use inclusion strategies and engage lifelong learning. The teachers are required to have a passion for teaching in the school community but also in the wider community and act as agents of change (MoE, 2017, p.10)

The NTS is grouped into three domains, each with its own sub-group:

a) Professional values and attitudes. The sub-groups are 1) professional development and 2) community of practice.

b) Professional knowledge with sub-groups being 1) knowledge of educational framework and curriculum, and 2) knowledge of learners.

c) Professional practice with the sub-divisions being 1) managing the learning the learning environment 2) teaching and learning and 3) assessment.

From the NTS, what teachers are expected to value, know and do are incorporated in the three domains and sub-divisions that constitute it. The domains intersect with each other with the aim of developing a teacher competent enough to teach in the Ghanaian classroom at the end their four-year training programme.

This reform has led to a number of changes in the teacher development programme which took effect in 2018 with the intake of the first batch of 4-year degree students in the CoE. First is the introduction of specialism at the pre-tertiary viz; Early grade level (KG -P3), Upper Primary (P4-P6), JHS and SHS. This is a marked change in how teachers have been prepared over the years. In the last few years prospective teachers from the CoE could be categorized into three groups namely: generalists who were expected to teach all school subjects at the primary school, the specialists including mathematics and science teachers, and early childhood teachers. The introduction of the four areas of specialism means that prospective teachers, ultimately, will be licensed to teach at very specific grade-bands within the elementary and middle school levels. Some of the anticipated benefits from such a move are to enable: 1) prospective teachers to acquire deep knowledge within a specified grade-band; 2) extensive knowledge and experiences within the chosen grade-band or specialism (MoE, 2017).

Second, the minimum entry requirement for teaching is Bachelors in Basic Education and no longer Diploma. Since October 2018, all new entrants to the CoE are admitted to pursue Bachelor in Basic Education programmes. The upgrade from Diploma to Degree means an increase in credit weightings and hence, courses to take thereby providing opportunities for prospective teachers to deepen their content knowledge. Such a move may help address some of the concerns about the adequacy of the content knowledge teachers possess as a proxy to the quality of teaching. Additionally, there are clearly defined teaching standards to help bench-mark the quality of teaching. Again, the NTECF is intended to guide all universities offering teacher education in their development of programmes so there is a shared vision of the kind of teacher Ghana needs. While the demand to follow a common framework in developing teacher education programmes may stifle curricular innovations the advantage is the near similarity in design thereby minimizing any variations and teacher competencies as pertains in countries without a national curriculum or framework. It also ensures that the quality of learning a student experiences is not due to the institution his or her teacher graduated from.

Furthermore, there is a change in how the field experience component is organized. In the new teacher development model prospective teachers are to engage in what is referred to as supported teaching in school (Pillar 4, see Table 1) throughout the eight semesters of study. This implies that prospective teachers get to familiarize themselves with the professional aspect of teaching while taking various courses at college. That is, student teachers, right from the first year, first semester, will start to acquire teaching experiences through regular school-based practicum to observe and also co-teach with a more experienced in-service teacher. This is in sharp contrast with the old model of teacher development where supported teaching (practicum), the on-campus segment happens for a semester during the second year of the three-year programme with the off-campus occurring for the whole of the third year, which is the final year of the programme. Such a design in learning to teach, if properly organised, can provide immediate reinforcement of the theory being learned in the CoE as the prospective teachers visit the schools and come back to campus to share their experiences for the needed theoretical underpinning and possible strategies to address them.

Assessment strategies have also changed. In the new framework, there is strong emphasis on formative assessment to support learning. Globally, many teacher education programmes have shifted to criterion-based forms of assessment and use of professional standards and rubrics as a basis for formative assessment in teacher education due to standard-driven reforms (Conner & Sliwka, 2014). Portfolios, in which prospective teachers document and reflect upon their own learning, have become more common. The NTECF prescribes specific assessment for each pillar of the curriculum. The student teachers are to be assessed within the three domains of NTS and aligned to the pillar of the curriculum framework such that at the end of the four year training they would have acquired subject specific, pedagogical and assessment skills to teach at the age, ability and aptitudes of the learners they are being trained for.

At the heart of the strategies for assessment is the creation of a professional portfolio which should include: 1) evidence of learning from the training institution in the form of assignment, examinations and lecture notes and 2) evidence of learning from in-service school in the form of lesson plans, study notes, resources, assessment records, learner exercise books, evaluation form from mentors among others. It is expected that prospective teachers who are still learning to teach would be realistically and fairly assessed against the teaching standards with particular emphasis on their creative and innovative skills as well as their possession of identified professional values and attitudes.

The National Teaching Council, NTC, has also commenced the licensing of the teaching profession. Once student-teachers have completed their 4-year Bachelor of Education degree, they will then spend one year teaching in the basic schools (pre-tertiary level), after which they will receive their license to practice and achieve qualified teacher status.

5. Implications and Conclusion

Ghana is one of the African countries whose learners perform exceptionally poorly in international benchmark assessments with teacher quality being a concern (Buabeng, Owusu, & Ntow, 2014). The International Association for the Evaluation of Educational Achievement [IEA] (2012) highlights poor quality of teaching and teachers' poor content knowledge as some of the contributing factors. Hence, any efforts to upgrade the quality of teachers at the basic school level, as depicted by the NTECF and NTS should be welcome news. The introduction of the NTECF and NTS has the potential to bring about some level of improvement in the quality of teachers that are produced by the various teacher education institutions and classroom instructional practice. Improving the quality of teachers and the image of the teaching profession in Ghana is inevitable. There is the need for a competency-based approach which recognises teaching as interplay of knowledge, skills, values and attitudes to raise learning standard to be adopted as captured in the NTS document. We envisage that improved teacher qualification will result in improved knowledge (CK, PK and PCK) and skills required for professional effectiveness. Despite this stated enthusiasm, there are some contextual issues which could negatively affect the intended gains from the current reforms.

The first issue has to do with the capacity of tutors teaching in the various CoE. At the moment, not all the tutors have a research-based masters' degree, a minimum requirement, to teach at that level. This inadequate research-based preparation of the tutors could affect their ability to supervise project work (long essays) considering that the 'new' Ghanaian teacher is expected to be a reflective practitioner who engages in small-scale inquiry to address local issues. The project works are vital in building the capacity of pre-service teachers to identify and design solutions to classroom problems by engaging in action research. It is envisaged that prospective teachers will see teaching as a lifelong endeavour where the teacher is constantly seeking solutions to classroom-based challenges by conducting some basic research in their classrooms and schools. To achieve this goal will require tutors who have the expertise to provide support for the teacher trainees so that they are equipped with the necessary research skills.

A second issue regarding the tutors' capacity is whether or not they have the competency to teach undergraduate level courses. All along, the tutors have been teaching diploma courses and so with the introduction of more advanced topics in the curricular as well as new courses to the degree programme (due to an increase in credit weighting from 68 credits to at least 165 credits) they are expected to have the required academic background to effectively teach at that level. For instance, although the tutors possess a Master's degree, some of them have their degrees in subject areas which are different from the programme of study at their bachelors which is referred to as 'skirt and blouse' in Ghana. A possible effect is that the affected tutors may have to rely on their first degree knowledge to teach a bachelor's degree student which is undesirable. There is therefore a need for intensive and regular in-service training (INSET) programmes to empower the tutors to teach both the content and philosophies underpinning the teaching of the various area specializations and specific courses. Even for those who have the required master's degree in their teaching subjects, there is still a need for INSET to enable them teach especially the new courses introduced which they may have forgotten because they were not teaching those topics.

A third issue that should be attended to has to do with lesson delivery. We argue that this is where the bulk of the work is. Radical changes in teaching are called for if the visions as outlined in the NTS and NTECF are to be attained. In this regard, the content courses should be taught in ways that would make envisioned and privileged pedagogy visible to the prospective teachers. The tutors have to model this privileged pedagogy where students are actively involved in the teaching and learning situation so that the prospective teachers have new images of teaching markedly different from what they might have experienced as students at the basic and senior high school levels. This calls for the setting up of instructional laboratories which are well-equipped with relevant teaching and learning materials in the institutions for teacher training. The teaching of pedagogy courses should involve the requisite teaching and learning materials for the prospective teachers to see these materials and learn how to use them and even wean their students of them as they begin to think abstractly. Also, the dual mode of delivery which treated content as being separate from pedagogy used what Britzman (1991) refers to as the separation of content from methodology.

The fourth critical issue has to do with the placement schools that will be used during the supported teaching component of the four-year programme. Considering that a number of schools in some areas are hard-to- reach, poorly equipped and with inadequate trained staff (UTDBE pathway), there is a need for careful selection of schools with well-qualified teachers to provide mentoring for the prospective teachers. With the new vision for teaching as espoused in the NTS, there is a strong need for capacity building for the in-service teachers in the schools of practice. This will ensure that the mentoring provided by the cooperating supervisors (those in the placement schools) to the

prospective teachers is complementary and reinforces what has been provided them in their CoE. Otherwise, there is a strong possibility of these prospective teachers being counter-socialised by the in-service teachers as they come face-to-face with the challenging conditions some of them teachers find themselves in. This also raises the issue of: a) how are schools selected to serve as placement schools (partner schools) for the CoE students to observe and possibly learn from? b) Who gets to be a mentor in these placement schools, that is, what should be the qualification or credentials of such mentors? Currently, there is no official mentoring policy in place to address these and other concerns. It appears that prospective teachers may find themselves in schools where the mentor maybe in more training than the supposed mentee especially as more and more students have to be placed in schools.

Again, as required that all prospective teachers of all the CoE from levels 100 to 400 be on supported teaching every semester, this has the potential to disrupt the calendar of the schools they are placed. There is therefore a need to ensure that in the quest to provide real classroom context that enables teacher trainees to appreciate the complexity of teaching thereby avoiding the apprenticeship of observation phenomenon (Lortie, 1975), teaching and learning activities do not suffer unduly.

In conclusion, the current teacher education reform has potential to transform teaching as envisaged. However, without the right mechanisms in place such as model schools for prospective teachers to learn best practices from, radically different pedagogies being adopted by College tutors, and an attitudinal change by all stakeholders, this reform may well be replaced by another reform in case of a change in government due to the challenges enumerated in this paper.

References

- Anamuah-Mensah, J. (2006). Teacher education and practice in Ghana. In T. R. Kolawole & P. Kupari (Eds.), *Educational issues for sustainable development in Africa* (pp. 28-40). Lasonen Johana: Institute for Educational Research.
- Archibald, S. (2006). Narrowing in on educational resources that do affect student achievement. *Peabody Journal of Education*, 81(4), 23-42. https://doi.org/10.1207/s15327930pje8104_2
- Asare, K. B., & Nti, S. K. (2014). Teacher education in Ghana: A contemporary synopsis and matters arising. *SAGE Open*, 4(2), 1-8. https://doi.org/10.1177/2158244014529781
- Bailey, J., Blakeney-Williams, M., Carss, W., Edwards, F., Hāwera, N., & Taylor, M. (2011). Grappling with the complexity of the New Zealand curriculum: Next steps in exploring the NZC in initial teacher education. *Waikato Journal of Education*, 16(3), 125-142. https://doi.org/10.15663/wje.v16i3.40
- Britzman, D. P. (1991). Decentering discourses in teacher education: Or, the unleashing of unpopular things. *Journal of Education*, 173(3), 60-80. https://doi.org/10.1177/002205749117300305
- Buabeng, I., Owusu, K. A., & Ntow, F. D. (2014). TIMSS 2011 science assessment results: A review of Ghana's performance. *Journal of Curriculum and Teaching*, 3(2), 1-12. https://doi.org/10.5430/jct.v3n2p1
- Conner, L., & Sliwka, A. (2014). Implications of Research on Effective Learning Environments for Initial Teacher Education. *European Journal of Education*, 49(2), 165-177. https://doi.org/10.1111/ejed.12081
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education policy analysis archives*, 8(1), 1-15. https://doi.org/10.14507/epaa.v8n1.2000
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3), 300-314. https://doi.org/10.1177/0022487105285962
- Darling-Hammond, L., & Baratz-Snowden, J. (2005). *A good teacher in every classroom: Preparing the highly qualified teachers our children deserve*. San Fransisco, CA: John Wiley and Sons, Inc.
- Ell, F., & Grudnoff, L. (2013). The politics of responsibility: Teacher education and "persistent underachievement" in New Zealand. *Educational Forum*, 77(1), 73-86. https://doi.org/10.1080/00131725.2013.739023
- International Association for the Evaluation of Educational Achievement [IEA]. (2012). In M. O. Martin, P. Foy, & G. M. Stanco (Eds.), *TIMSS 2011 international results in science*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center.

Lortie, D. C. (1975). Schoolteacher: A sociological study London: University of Chicago Press.

Loughran, J. J., Berry, A., & Mulhall, P. (2012). Understanding and Developing ScienceTeachers' Pedagogical

Content Knowledge (2nd ed.). Boston: Sense Publishers. https://doi.org/10.1007/978-94-6091-821-6

- Ministry of Education. (2012). Pre-tertiary teacher professional development and management in Ghana: Policy framework. Accra: Ghana Education Service.
- Ministry of Education. (2017). National teacher education curriculum framework: The essential elements of initial teacher education. Accra: Author.
- Organisation for Economic Co-operation and Development [OECD]. (2013). *Innovative learning environments* Paris: Educational Research and Innovation, OECD Publishing.