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# Teacher Educators' Collaboration and Involvement in Teacher Education Curriculum Development in Sub-Saharan Africa: The Case of Ghana

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Abstract

Research indicates that students' learning outcomes are significantly influenced by the effectiveness of their teachers. Similarly, studies confirm that the quality of initial teacher training is a key predictor of teacher effectiveness. Empirical evidence further suggests that effective collaboration and cooperation among relevant stakeholders strongly correlate with the success and quality of teacher education curriculum reforms. Despite progress in improving the quality of teacher education in Sub-Saharan Africa, persistent challenges remain. Notably, many teachers who excel during their initial teacher education programs consistently fail the teacher licensure examinations, which are intended to certify them as professional educators. This raises critical questions, including whether teacher educators actively collaborate with other stakeholders in the design and implementation of teacher education curriculum reforms. The present study aimed to assess the extent of collaboration and involvement of teacher educators in the design and implementation of the teacher education curriculum framework in Ghana. The study sought to contribute to the discourse on how stakeholders can effectively collaborate to enhance the quality of teacher education through curriculum development and implementation. Guided by Taylor's (2003) Model of Participatory Curriculum Development (PCD), the study employed a cross-sectional survey design with a quantitative research approach. A sample of 357 teacher educators from 27 teacher education institutions across Ghana participated in the study. Both inferential and descriptive statistics were employed for data analysis. The results indicate that the level of teacher educators' participation in the design of the teacher training curriculum in Ghana was statistically insignificant. Similarly, their level of collaboration with other stakeholders during curriculum implementation was also found to be statistically insignificant. The study concludes that teacher educators in Ghana have limited involvement in both the design of the teacher training curriculum and its implementation in collaboration with other stakeholders. This suggests that these factors may not play a significant role in shaping or influencing the effectiveness of the teacher training process in the country. The study recommends that education authorities strengthen policy frameworks and institutional mechanisms to promote and institutionalize the participation and collaboration of teacher educators with other stakeholders throughout all phases of teacher education curriculum development. Further research could explore potential barriers to greater involvement and collaboration, as well as the impact of such factors on the quality of teacher training.

**Keywords**: Teacher Education; Curriculum Framework; Participation; Collaboration

## Introduction

Quality teacher education is fundamental to the success of any educational system and, to a large extent, to the growth of an economy. Well-trained teachers, equipped with appropriate pedagogical and content knowledge, invariably deliver quality teaching, which ultimately enhances students' learning outcomes (Hill & Chin, 2018; Odumosu, Olisama & Areelu, 2018; Filgona, Sakiyo & Gyamy, 2020). Improved student learning outcomes have been shown to correlate strongly with labor market outcomes, contributing to economic growth and development (Blazar, 2019).

Significant progress has been made globally through policy formulation aimed at improving teacher quality and teaching effectiveness. For instance, the United Nations Sustainable Development Goal (SDG) 4 aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." A key strategy under this goal is the improvement of professional standards for teachers. Target 4c specifically aims to substantially increase the supply of qualified teachers by 2030. To achieve this target, UNESCO, in collaboration with international bodies such as Education International, developed the Global Framework of Professional Teaching Standards. Additionally, the International Taskforce on Teachers for Education (TTF, 2030) formulated Teacher Policy Development Guidelines to assist countries in designing holistic and comprehensive teacher development policies using a participatory approach. At the regional level, the African Union's Continental Education Strategy for Africa (AU-CESA, 2016–2025) and Africa Agenda 2063 (AU, 2015) place a strong emphasis on teacher quality (AU, 2015). One of the objectives of CESA is to revive the teaching profession to ensure quality and relevance at all educational levels. Furthermore, the African Union Teacher Qualification Framework proposes admission standards and basic competencies for educators, along with minimum competencies for teachers and entrance requirements for the profession (AU Commission, 2019). Several Sub-Saharan African countries, including Ghana, Uganda, Burkina Faso, Benin, and Nigeria, have adopted this framework, with support from the TTF, to standardize teacher preparation and deployment in their respective contexts.

Nationally, the Education Act (Act 778) was enacted by the Ghanaian government in 2008, leading to the establishment of the National Teacher Council (NTC) under Section 9 of the Act. The NTC is responsible for setting ethical standards for education, overseeing professional practices, and managing the registration and licensing of individuals wishing to enter the teaching profession. Act 778 focuses on professionalizing teaching in Ghana, establishing clear codes of ethics and minimum competencies for teachers at the pre-tertiary level. Additionally, the National Teachers' Standards (NTS) were introduced to

outline the minimum levels of practice required of trained teachers at the conclusion of their initial teacher education, aiming to inspire and challenge all learners to reach their full potential.

In 2017, Ghana's Ministry of Education (MOE) introduced the National Teacher Education Curriculum Framework. The framework outlines the essential elements an initial teacher education (ITE) curriculum should address to prepare competent teachers and serves as a benchmark for reviewing all teacher education curricula, including the 4-year Bachelor of Education (B.Ed.) program. Teacher training institutions in Ghana are required to adopt this framework to train teachers for the school system. As part of this reform, the NTC introduced the teacher licensure examination to ensure that graduates from teacher training institutions meet professional standards before entering the teaching profession. Assessments for licensure are based on the curriculum framework. The introduction of licensure examinations and continuous professional development policies by the NTC aims to improve the professional standing and status of teachers in Ghana (MOE, 2018).

Despite these reforms in Sub-Saharan Africa, skepticism persists regarding the quality of teacher education in Ghana. The 2013/4 Education for All (EFA) Global Monitoring Report warned that raising the formal educational qualifications required to become a teacher does not necessarily ensure improved teacher quality; the quality of academic qualifications is equally important. This concern was echoed by the Ghana National Teacher Council (NTC, 2023), which highlighted an increasing failure rate among teachers taking the licensure examination. In 2023, only 1,277 of 7,728 candidates (16.5%) passed the examination after completing their initial teacher training. Similarly, in Nigeria, The Punch (2023) reported that 30% of the 15,733 candidates who sat for the professional examination failed. In Sierra Leone, Awoko (2024) documented unrest among teachers following curriculum reforms, while UNESCO IICBA (2023) noted dissatisfaction in The Gambia due to the misalignment of its curriculum framework with UNESCO's Global Frameworks.

Scholars have raised concerns about the lack of stakeholder consultation in curriculum reforms. Westbrook et al. (2013) argue that new curricula often fail to achieve their intended goals because key stakeholders, such as teachers, are excluded from the design process. Obi (2014) attributes poor learner performance to teachers' lack of understanding of the curriculum, resulting from their non-participation in its development. Johnson et al. (2021) contend that stakeholder involvement enables curriculum developers to identify and address competency gaps among teacher trainees. Other researchers (Blignaut, 2009, 2013; Gyurko, 2012; Talla, 2009, 2012; Nouri & Sajjadi, 2014; Adu-Yeboah, 2021; Fullan, 2007) have emphasized the importance of teacher involvement at all stages of the curriculum development process, suggesting that it fosters a sense of ownership, accountability, and mutual understanding, which are critical for addressing the

diverse needs of learners and adapting to the dynamic demands of society. Adu-Yeboah (2021), for instance, explains that teacher educators' collaboration and participation in curriculum development are essential to ensuring that the curriculum remains relevant, context-specific, and aligned with national education goals.

Akyempong (2014) raises concerns about the mechanisms in place to facilitate the meaningful participation of teacher educators, the challenges they face in influencing decision-making, and the impact of their contributions on the overall quality of teacher education. Understanding these dynamics is crucial for strengthening the collaborative efforts required to develop curricula that equip teachers with the knowledge, skills, and attitudes necessary for effective teaching in the 21st century in Sub-Saharan Africa. However, empirical evidence on stakeholder involvement and collaboration in curriculum development remains limited. A review of teacher development policies in Sub-Saharan Africa by TTF (2021) suggests that while initial efforts to involve teacher training institutions in policy development were challenging, the process has become more inclusive and transparent. Nonetheless, the extent of teacher educators' involvement in curriculum development remains unclear. Naylor and Sayed (2014) highlight mixed evidence regarding the relationship between stakeholder involvement in curriculum implementation and learning outcomes, underscoring the need for further research. Cochran-Smith (2003) also emphasizes the lack of research on teacher educators' professional responsibilities, with existing studies often focusing on general demographic aspects.

This paper explores the role of teacher educators in curriculum development in Ghana, examining the nature and scope of their collaboration and participation. It seeks to clarify the opportunities and challenges related to their participation, as well as the consequences for teacher preparation and the broader educational system. By highlighting best practices and potential areas for improvement, this study aims to contribute to ongoing efforts to enhance the quality of teacher education in Ghana through more inclusive and participatory curriculum development processes.

## Purpose of the study

The purpose of the study was to determine the level of involvement and collaboration of teacher educators with other stakeholders in teacher training curriculum design and implementation in Ghana.

## Hypothesis

The study sought to test the following hypotheses.

1. $H_1$: There is a higher level of participation of teacher educators in the design of

teacher education curriculum framework in Ghana

2. $H_{1:}$ There is higher level of involvement of teacher educators in the development of teacher education curriculum in Ghana.
3. $H_{1:}$ There is a higher level of collaboration of teacher educators with other relevant stakeholders in teacher education curriculum implementation in Ghana

## Literature Review

### Theoretical Framework

Taylor's (2003) Participatory Curriculum Development (PCD) process model, also known as "The 10 Key Stages in the Participatory Curriculum Development (PCD) Process," was adopted to guide the study. The 10 key stages are as follows:

1. A workshop to raise awareness among important stakeholders
2. A follow-up session with a larger stakeholder group (as determined in step 1)
3. Evaluation of training requirements
4. Creation of curricular frameworks that are part of a larger curriculum
5. Creation of a comprehensive curriculum
6. Training in learner-centered teaching techniques (TOT)
7. Training in learning materials development
8. Testing of newly created or updated curriculum
9. Improvement of the PCD assessment method
10. Preservation of the PCD procedure

The model aims to encourage the genuine involvement and collaboration of all relevant stakeholders in the curriculum development process. It further seeks to create a curriculum through the sharing of knowledge and experience among the different participants in an educational training program. The approach strives to enhance ownership of the entire learning process by forming working partnerships between teacher educators, students, and other stakeholders (Taylor, 2003). This model was employed in the study to examine the process used in creating the teacher education curriculum in Ghana and to determine the extent of teacher educators' involvement in each of the 10 stages.

### Conceptual Review

#### Teacher Education, Teacher Educator and Teacher Education Curriculum

Teacher education is a critical component of the overall educational system. The concept is vast, evolving, and dynamic (Gandhi, 2017), and as such, it has been defined in a variety of ways. For instance, The Good's Dictionary of Education defines teacher education as all formal and non-formal actions and experiences that prepare an individual for the teaching profession. Conversely, Wikipedia.com defines teacher education as the

policies and processes aimed at providing future teachers with the knowledge, attitudes, conduct, and abilities required to fulfill their duties effectively. Tasleema and Muddasir (2012) argue that teacher education is a dynamic field encompassing various methods, techniques, processes, skills, approaches, laws, and regulations that support educators' development within the teaching profession.

The current study defines teacher education as a deliberate formal, non-formal, and informal process by which the necessary skills, knowledge, attitudes, values, and competencies are imparted to an individual to prepare them for the responsibilities of a teacher. This definition encompasses training processes in formal institutions (teacher training institutions) as well as in-service training (on-the-job training). However, the focus of the study is on the formal education provided in teacher training institutions. It can thus be inferred from this definition that a teacher educator, sometimes referred to as a teacher trainer, is an individual with extensive skills, knowledge, attitudes, values, and competencies related to the teaching profession. A teacher educator provides the necessary training, leadership, and mentorship to prospective teachers in a formal institution.

Teacher education curriculum cannot be defined without first considering the meaning of the word "curriculum." While there are multiple definitions of curriculum, Tanner and Tanner (1980) provide one of the most comprehensive ones. According to Tanner and Tanner (1980):

> "Curriculum is the planned and guided learning experiences and intended learning outcomes, formulated through the systematic reconstruction of knowledge and experience, under the auspices of the school, for the learner's continuous and willful growth in personal-social competence" (Tanner & Tanner, 1980, p. 25).

Curriculum development plays a pivotal role in shaping the quality of education delivered in any country (Print, 1993; Ornstein & Hunkins, 2017). Based on Tanner and Tanner's (1980) definition, this study views the teacher education curriculum as the totality of all planned and guided learning experiences, as well as their associated learning outcomes. These outcomes are scientifically and systematically developed by education authorities to equip individuals with the necessary skills, knowledge, attitudes, values, and competencies to perform the roles of teachers.

The focus of the teacher education curriculum is on the essential elements that teacher trainees need in order to be competent and effective in the classroom. According to the Ghana Ministry of Education (2017), these core elements include, but are not limited to, subject knowledge, pedagogic knowledge, literacy studies, and supported teaching. Other cross-cutting issues include equity and inclusivity, professional values and attitudes, as well as metacognitive skills. Cultural and social-linguistic diversity is a reality in all

classrooms (MoE, 2017), and teacher trainees must understand this to address the challenges of learning and teaching for diversity. The development of professional identity, social norms, ethics, and practices within the school and teaching profession—including reflective practice and a commitment to lifelong learning—is also fundamental to the teaching profession (MoE, 2017). Other metacognitive skills and competencies, such as critical thinking, problem-solving, creative thinking, communication skills, information and communication technology (ICT), social skills, and a commitment to lifelong learning, are essential for becoming an effective teacher and must be included in the teacher education curriculum framework. The inclusion of all these elements in a teacher education curriculum framework is a complex process that requires the input of multiple stakeholders, including teacher educators.

## Teacher Education Curriculum in Ghana

In Ghana, teacher education curriculum development serves as a critical foundation for preparing competent and effective educators who can meet the demands of a dynamic and diverse educational landscape (Anamuah-Mensah et al., 2002). This has become more crucial owing to global policy shifts towards revitalizing the teaching profession and making it relevant at all levels of the education system. The Ghanaian Ministry of Education, in conjunction with UKAid, launched an initiative called Transforming Teacher Education and Learning (T-TEL). The project's stated goal was 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 resulted in the creation of the National Teacher Education Curriculum Framework (NTECF) and the National Teachers' Standards (NTS), which govern the development of teacher education programs across the country and establish basic professional capabilities in the teaching profession. The existing curriculum, which had been in use for about 20 years, was expected to be replaced by the new curricula based on these two documents, NTECF and NTS. This move was in response to a previous criticism over the lack of consistency in the training of aspiring teachers throughout the different teacher education institutions, which was brought about by the employment of different curricula by the different institutions.

The NTECF is made up of four pillars that represent the knowledge required for initial teacher certification. Although they appear to be separate knowledge bases, there is an implicit awareness that these pillars are linked to information fragmentation (Britzman, 1991). The NTECF is planned to be practice-focused, with practical evaluations of teaching abilities accounting for 30% of total assessment points. It will also focus on ensuring that instructors are confident in using learner-centered techniques, such as ICT, to promote critical thinking and problem-solving. Teaching practice in schools (assisted teaching in

the language of the new curriculum) will be an important element of the learning process, with student-teachers spending time in partner schools in years 1, 2, 3, and 4, rather than only Year 3 as is the case with the existing diploma. Literacy studies encompass Ghanaian, English, and French. Ghana is a multilingual country with 86 spoken languages and dialects, although only nine of them are taught in schools. Additionally, French and Arabic are taught as foreign languages. Students can major and/or minor in any language taught in the schools. The NTS establishes a set of expectations for all those involved in teacher education and teachers (pre-service and in-service) regarding 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 in the larger community.

## Teacher Education Curriculum Stakeholders

Curriculum stakeholders and professional stakeholders are two distinct types of stakeholders in teacher education. According to Johnson et al. (2021), curriculum stakeholders play a crucial role in determining the content, delivery methods, evaluation standards, and scope of the curriculum necessary to qualify for a particular profession. These stakeholders are primarily teachers or individuals actively involved in basic teacher education. In contrast, professional stakeholders are more concerned with specific professions, the professional attributes of graduates, job capacities, and conditions—particularly career development, knowledge, and skills. This group includes teacher professional bodies such as licensing authorities, teacher associations, and employers.

The Ghana National Teacher Education Curriculum Framework identifies nine key stakeholders in the curriculum development process. These are:

1. The Ministry of Education
2. Ghana Education Service
3. Ghana Tertiary Education Commission
4. Ghana Teachers Council
5. Teacher Training Colleges
6. Teacher Educators
7. Teacher Associations
8. In-service Teachers
9. Student-Teachers

The involvement and collaboration of these stakeholders are essential for the success of the teacher education curriculum framework (Johnson et al., 2021). Engaging these stakeholders fosters a collaborative approach, enhancing the quality and relevance of the curriculum. Research indicates that active stakeholder involvement leads to more effective curriculum implementation and better educational outcomes (Adu-Yeboah, 2021;

ERIC, 2023). Involving and collaborating with various stakeholders through open discussions that encourage comments, feedback, critique, and guidance further helps to align the curriculum's content and delivery methods with the needs of the communities that graduates will serve.

## Empirical Framework

### Participation of Relevant Stakeholders in Curriculum Development Processes

Since education is expected to respond to societal needs, the curriculum development process should involve individuals who have lived experiences within that social system (Kelly, 2004; Carl, 2017; Priestly et al., 2021). Stakeholders in curriculum development typically include educators, students, parents, administrators, policymakers, and representatives from industry and community organizations (Tyler, 2013; UNESCO, 2017; Anderson & Rogan, 2011). Each group brings unique insights that reflect different facets of educational priorities.

Numerous studies have explored the extent of stakeholder involvement in curriculum development processes. Constance and Chrysostom (2021) employed an E-Learning approach to investigate stakeholder engagement in the implementation of Kabale University's M.A. Literature program. Their study revealed that stakeholders play a major role in curriculum creation. The authors found that engagement with various stakeholders through feedback, critique, and guidance could enhance both the content and delivery methods of the program. In another study on teacher involvement in curriculum development, Lunenberg et al. (2014) found that Dutch teacher educators often follow rather than actively participate in the teacher education curriculum design process. In contrast, Taylor (2004) and Parsons and Beauchamp (2012) observed significant involvement of teacher educators in identifying needs for teacher training and setting the aims and learning objectives of teacher education curricula. Similarly, a review of teacher development policies in Sub-Saharan African countries by the TTF (2021) suggests that, although it was initially challenging to involve teacher training institutions in the curriculum policy development process, the process became more inclusive and transparent with meaningful stakeholder engagement.

The evolving needs of the Ghanaian education system, coupled with global trends in teacher education, demand curricula that not only reflect contemporary best practices but also address the socio-cultural and economic realities of the nation (Moon, 2013). Teacher educators, therefore, play a critical role in bridging the gap between policy and practice, leveraging their firsthand knowledge of classroom realities and teacher preparation to inform curriculum design and implementation (Osei, 2017). However, the literature concerning the extent and nature of teacher educators' involvement in the

curriculum development process remains underexplored. The aim of this study is to determine the level of involvement and collaboration of teacher educators in teacher education curriculum design and implementation in Ghana.

**Conceptual Framework**

This research employed the ADDIE Model of Curriculum Development. The ADDIE theoretical model is a general-purpose development paradigm that is commonly utilized by instructional designers, developers, and trainers for designing instructional products. The model consists of five phases: analysis, design, development, implementation, and evaluation.

Figure 1 depicts how stakeholders' dynamic involvement might evolve as they progress through the engagement phases. The phases outlined in the model are qualitatively distinct, represent significant difficulties to the successful implementation of a teacher education program, and include different important stakeholders.

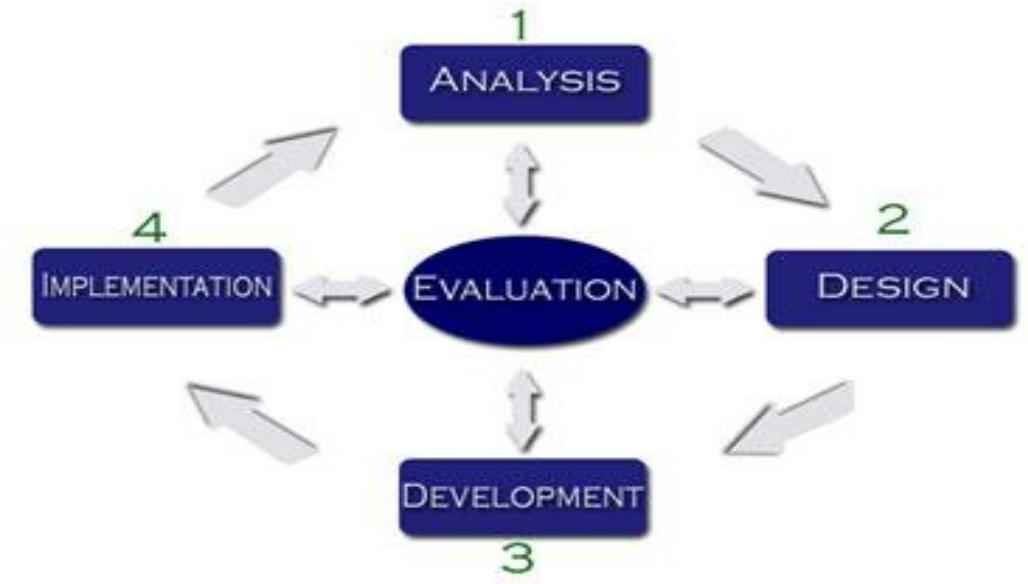


Figure 1: ADDIE Model of Curriculum Development

The analysis phase is the most significant part of the ADDIE theoretical model. Analysis is the process of identifying an audience, goals, and objectives based on the identified problem, as well as an assessment of the environment and stakeholder needs. This allows for an assessment of the development in terms of technological and system

feasibility, legal feasibility, operational feasibility, technical feasibility, and economic viability. During this phase, curriculum developers establish and develop a thorough grasp of the audience's needs and limits, current knowledge, skills, and course objectives.

The model's design phase aims to create a clear concept of the future curriculum, which includes the definition of course objectives, lesson planning, topic content, training methodology, presentation methods, learner exercises, and assessment criteria, all of which are systematically structured in a course map. The most crucial action serves as the foundation for the future curriculum.

The development phase includes the detailed development of courses identified in the course map (course name, code, contact hours, credit unit, brief, description, course objectives, learning outcomes, and detailed indicative content), as well as the preparation of learning materials and supporting technology (textbooks, visual aids, knowledge assessment tools, and so on). This step entails detailed description of a prospective curriculum.

The implementation phase is where the prepared course is put into action, and the final product is created depending on needs and faults. Implementation is a periodic activity that involves the effective and efficient execution of prescribed courses. The first implementation of a curriculum requires substantial effort in training personnel to teach newly established courses.

The suggested model's evaluation phase takes into account important stakeholders' comments as well as continual quality assessment. The feedback received during this phase gives valuable insight into the reactions of clients, suppliers, and intermediaries to the actual implementation of a research programme, as well as the consequences of that implementation. Data acquired through surveys may be used to fine-tune the curriculum and establish skills.

The purpose of this study is to investigate the amount of collaboration and participation of important stakeholders in the design, development, and implementation of the National Teacher Education Curriculum Framework**.**

## Methodology

### Research Approach

The quantitative research technique was used in this investigation. The goal of the quantitative research is to measure and analyse variables numerically in order to draw conclusions about them (Apuke, 2017). The researcher used the method because he wanted to measure and analyse the variables involved numerically with the view to testing the hypotheses and drawing conclusions about them.

## Research Design

The descriptive cross-sectional survey design was used to conduct the study. The choice of this study methodology was informed by Fraenkel, Wallen, and Hyun (2012), who claim that a common purpose of cross-sectional research is to investigate how a broad group of people feel and act toward a specific subject or problem across time. Furthermore, the research design was chosen based on Leedy and Ormrod's (2016) recommendation that it allows the researcher to gather information about the perceptions of a specific phenomenon, in this case, the participation of teacher educators in teacher education development processes. Furthermore, Amedahe (2002) believes that in descriptive cross-sectional research, the assumptions or relationships to be documented must exist, and that the goal is to characterize activities, objects, processes, and people accurately. The researcher was simply concerned in explaining the phenomena of participation in curriculum creation processes, not changing the factors.

## Population and Sample

The population for the study was all teacher educators in all Public Teacher education institutions in Ghana. According to the education sector performance report (2023), there are 47 Public Teacher education institutions in Ghana with a total population of 4,312, teacher educators. A sample size of 357 teacher educators was arrived at using Adam (2020) Table of sample size determination. The multi-stage sampling technique was then used to sample respondents. This is a combination of multiple sampling techniques including Stratified, proportionate, and simple random and systematic sampling techniques at each stage of the sampling procedure

Studies suggests that using one sampling technique especially when the population is heterogeneous does not provide the randomization required to assure trust of the results. The researcher was sure of minimizing biases as much as feasible by integrating these diverse sampling techniques. Final sample consists of 357 teacher educators made up of 200 males and 157 females.

## Instrument for Data Collection

The researcher employed a questionnaire as the primary data gathering tool for the investigation. According to Cohen, Manion, and Morrison (2005), the questionnaire is frequently used and is an effective tool for gathering survey information since it provides organized, numerical data and may be delivered without the researcher's presence.

The instrument consisted of five primary components. Section A of the questionnaire dealt with respondents' demographic or background data, such as their age, gender, and religious affiliation. Sections B through E dealt with issues of involvement and

cooperation in curriculum design, development, and implementation. To give easy and speedy responses to the questionnaire items, each item was fully formed of closed-ended statements on a 6-point Likert scale of "Not At All", "Very Low", "Low", "Moderate", "High", and "Very High".

The researcher sought professional help to verify that the instrument items aligned with the study's aims and topic area. Their recommendations and opinions served as the foundation for modifying the research items to make them more study-relevant**.**

### Pilot Testing of the Instrument

A total of 206 teacher educators from 4 private Colleges of Education were used in the pilot testing of the instrument. The purpose of the pilot test was to determine whether the items on the questionnaire actually reflected the constructs they intended to measure. Findings from the pilot study were used to test for reliability of the items in order to refine the instrument before the final data collection.

### Reliability of the Instrument

Reliability is the extent to which research tools produce consistent outcomes or data after repeated trials. Mugenda & Mugenda (2003). Cronbach alpha coefficient analysis was used to assess the items' internal consistency. It is used to test for dependability if the items have options. The analysis returned an alpha value of 0.72. The figure is considered high for internal consistency based on the recommendation of Fraenkel and Wallen (2000).

### Procedure for Data Collection

The researcher sought permission from the principals and Heads of Department in the Teacher Training Institutions. After clearance was given, the researcher together with some trained research assistants went to the institutions to engage the respondents in the data collection. The researcher emphatically told the respondents that the exercise was voluntary. It was also explained to them that the exercise was purely academic and that their responses would be kept confidential. Those who did not want to take part opted out. Those who volunteered to take part were engaged in the exercise. The exercise took 6 weeks to complete. It started on 21st August, 2023 and ended on 22nd September, 2023. The response rate was 87.6%. The survey's high response rate reduced the danger of non-response bias in the study findings (Massey and Tourangeau, 2013).

### Data Analysis Procedure

The questionnaire was edited/screened and inputted into SPSS (Version 20) for

further analysis. The demographic variables of respondents such as age, gender, years of work experience and religious affiliation were analysed using descriptive statistics. The level of participation and collaboration in teacher education curriculum design, development and implementation was determined using one-sample t-test. The one-sample t-test is used to test whether the population mean differs from a fixed value. Set value was 20. This was got by summing up the scores of all the 8 items which ranged from 1-40 and taking the average.

A sample mean significantly higher than the test value suggested a higher level of involvement and collaboration. A sample mean significantly lower than the test value suggested a low level of participation or collaboration A sample mean not significantly different from the test value suggested a moderate level of involvement or collaboration.

## Results and Discussion

The research study was designed to determine the level of participation of teacher educators in teacher education curriculum design and implementation. Five (5) hypotheses were set to guide the study. This section of the study presents the results by research hypothesis.

**Hypothesis 1:** *H1: There is a higher level of teacher educators' participation in teacher Education curriculum design in Ghana*

Curriculum design is the first stage in the curriculum development process. The hypothesis sought to determine the level of participation of teacher educators in teacher education curriculum design. Eight questionnaire items were set so solicit respondents' level of participation. A one-sample t-test was used to determine whether there were significant variations between the sample mean and the test result. The results are presented in Table 1.

Table 1: Results of Hypothesis 1 Test

| *Test Value = 20* | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | *Mean* | *SD* | | *95% Confidence Interval of the Difference* | |
| *t* | *Df* | *Sig. (2-tailed)* | | | *Mean Difference* | Lower | Upper |
| -2.932 | 402 | .004 | 19.2357 | 5.2320 | -.76427 | -1.2766 | -.2519 |

Results of the One Sample T-test as presented in Table 1 indicate that there is a statistically significant difference between the population mean or set value (M = 20) and the sample mean (M = 19.2357, SD = 5.23), t (2.932), df(402). The effect size was however

small with Cohen D = .145. The level of participation of teacher educators in teacher education curriculum design thus appears statistically significant (lower). However, the statistically significant difference does not imply practical difference. As indicated by the Cohen D value of 0.14, the effect size is small suggesting that practically, there are no significant differences. It implies that teacher education curricular designs are developed without the significant involvement of teacher educators.

This ideally should not be the case because this is the stage where the philosophy and the blue print of what should constitute the content, methodology and assessment procedures are decided. The results align with Hooghly and Bron (2008) contention that the national curriculum development in England relied heavily upon advisory committee of educators and a review panel made up of teachers, academics and business and industry to provide recommendations for the national curriculum. The results are however inconsistent with MoE (2017) reports that all stakeholders including teacher educators were represented in the Committee that drafted the Ghana National Teacher Education Curriculum Framework. Ramparsard (2001) and Beswick (2009) share their view that most curricular reforms in Africa and some parts of the World are initiated "top-down" without the significant involvement of major stakeholders such as teacher educators. This is possibly the case so far as the teacher education curriculum framework design in Ghana is concern. Consistent with the warning given by Cohen and Hills (2001) expecting teacher educators to embrace new instructional approaches without sufficient training and information on why such changes are necessary or warranted is possibly the reasons for the implementation challenges and the mass failure rate in the teacher licensing examinations in Ghana. As advised by World Bank (2003) opportunities should be created for teacher educators to work together with other stakeholders to co-operatively design the teacher education curriculum which will greatly enhance the probability of success in curriculum implementation.

**Hypothesis 2:** *There is higher level of involvement of teacher educators in teacher education curriculum development.*

The development phase of the curriculum is the stage where courses are indicated in the course map (course name, code, contact hours, credit unit, short, description, course goals, learning outcomes, and comprehensive suggestive content), and the development of learning materials and supporting technologies (textbooks, visual aids, knowledge assessment systems, etc.). This is mostly done by curriculum stakeholders. It is the stage in which thorough documentation of a future teacher education curriculum takes place. The hypothesis sought to determine the level of participation of teacher educators in its development. To test this hypothesis, the One Sample T-test technique was adopted. The results are presented in Table 2.

Table 2: Test Results of Hypothesis 2

| *Test Value = 20* | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Mean | SD | | 95% Confidence Interval of the Difference | |
| | | | | | Mean | | |
| T | Df | Sig. (2-tailed) | | | Difference | Lower | Upper |
| 12.385 | 402 | .000 | 23.9206 | 6.3546 | 3.92060 | 3.2983 | 4.5429 |

As indicated in Table 2, there is a statistically significant difference between the population mean or set value (M = 20) and the sample mean (M = 23.9206, SD = 6.3546), t(2.932), df(402), p = 0.00 The effect size was large with Cohen D = .617, The research thus fails to reject the hypothesis of significant level of involvement of teacher educators in teacher education curriculum development. This implies that teacher educators' participation in programme and course development, course naming and course code development, preparation of learning materials and textbooks is very high. The findings are also consistent with Taylor (2003) concept of participatory curriculum development that called to significant involvement of all relevant stakeholders at all stages of the curriculum development processes. Taylor (2004), Parsons and Beauchamp, (2012) suggest that this level of involvement help identify needs for teacher training, set aims and learning objectives, contribute to the development of the subject matter to be taught, and participate in the delivery and evaluation of the curriculum. When teachers are involved in curriculum development, encourages the incorporation of critical thinking skills into the curriculum. With first-hand knowledge of their students' capabilities, teachers can plan courses that challenge students to think critically, solve problems, and apply their knowledge in real-life situations. This approach not only prepares teacher-trainees for the future but also promotes a deeper understanding of the subject matter. Again, when teachers are involved in shaping the curriculum, they feel a sense of ownership over their work. This sense of ownership translates into increased motivation and commitment to delivering quality education.

***Hypothesis 4:*** *There is a higher level of collaboration among stakeholders in teacher Education Curriculum implementation in Ghana*

Collaboration of relevant stakeholders in teacher education curriculum implementation does not only ensure efficiency in the implementation process but it also ensures that there is constant feedback for quality improvement as implementation progresses. This calls for cooperation of all the stakeholders such as the Ministry of Education, Ghana Education Service, Ghana Tertiary Education Commission, Ghana

Teachers Council, Teacher Education Institutions Teacher Educators, Teacher unions, Teachers and Teacher Trainees. The hypothesis sought to determine the level of collaboration of these stakeholders in the implementation of the National Teacher Education Curriculum Framework. A One sample t-test was conducted to determine whether there were significant differences between the sample mean and the test value. The results are presented in Table 3.

Table 3: Results of Hypothesis 3

| Test Value = 20 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Mean | SD | | 95% Confidence | |
| | | | | | Mean | Interval of the Difference | |
| T | Df | Sig. (2-tailed) | | | Difference | Lower | Upper |
| -8.838 | 402 | .000 | 17.5112 | 5.6530 | -2.48883 | 3.2983 | 4.5429 |

As indicated in Table 3, there is a statistically significant difference between the population mean or set value (M = 20) and the sample mean (M = 17. 512, SD = 5.6530), t (8.838), df (402), p = 0.00 The effect size was medium with Cohen D = .440. In other words, the sample means score is significantly lower than the test value. The study thus rejects the hypothesis of a significantly higher level of collaboration among stakeholders of teacher educators in teacher education curriculum implementation. This suggests that there is little engagement, communication, cooperation and constant feedback among relevant stakeholders as the teacher curriculum framework is being implemented. The results do not conform to the suggestion by the World Bank (2003) which contends that opportunities for teachers to work together, share ideas, jointly solve problems, co-operatively create material, and greatly enhance the probability of success in curriculum implementation. The results are inconsistent with the curriculum development principle of "Self-Help" by Taylor (2001) which requires all stakeholders in curriculum development to collaborate, share task and responsibilities. It also defies Handler (2010) Taylor (2003) suggestions that teachers need to work collaboratively with another curriculum specialist in the implementation of the curriculum. Teacher education curriculum requires interaction between officers at the district office, principals, teachers, parents, students and the general public (Valencia et al. 2012). This is because the successful implementation of any curriculum requires an understanding of the power relations, traditions, roles and responsibilities of individuals in the school system.

## Conclusion

The study concludes that teacher educators in Ghana are not actively involved in teacher education curriculum design. There is less also the collaboration of teacher

educators with other major stakeholders such as the Ghana Teaching Council, the Ministry of Education, and the Ghana Education Service Teacher Unions in teacher education curriculum implementation. Inadequate collaboration does not provide adequate room for feedback concerning implementation challenges such as competency gaps in teacher training that need to be resolved formatively as implementation proceeds.

## Recommendations

The study recommends that education authorities in Sub-Saharan African Countries especially Ghana should formulate policy measures that will ensure effective participation and collaboration of teacher educators with other relevant stakeholders in teacher education in teacher education curriculum development processes Education authorities should further strengthen structures and mechanisms of policy and social dialogue to ensure that teacher educators participation is institutionalized throughout all phases of teacher education curriculum development.

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