

## **The Multiplier Effect in Practice: Piloting a National Peer Coaching Framework for Teacher Development in Ghana**

**(Authors Details)**

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### **Abstract**

In sub-Saharan Africa, teacher professional development has: been incoherent, happened in isolated instances and failed to scale up within the national requirement. Taking advantage of Oni and Oni (2017) Comprehensive National Blueprint on Standardising Teacher Qualifications and Continuous Professional Development in Nigeria, the study experiments with a national peer coaching model in Ghana to evaluate the success of school-based, standards-based professional growth. Drawing on Oni and Oni plea to address systemic coherence in teacher training, the intervention was set up to implement their proposal by means of incorporating reciprocal peer coaching, coaches accreditation based on national teacher standards, and quality assurance processes. The mixed methods cluster design of the research selected districts in order to study implementation fidelity, outcomes of teacher practice, and the diffusion of knowledge, the so-called multiplier effect, which takes place in non-coached peers. The findings show that peer coaching did not only enhance quality of observed practice and teacher self-beliefs of directly coached teachers but resulted in important spillover impacts within schools, and supports theoretical assumptions of spillover effects as multipliers. The findings indicate that the use of Oni and Oni standards-based CPD blueprint through the model of peer coaching is a cost-efficient and context-specific mechanism to transform the quality of teachers in Ghana and other countries within the West African region. The study wraps up with policy suggestions on how to scale-up at national level and adapt at regional level.

**Keywords:** Teacher professional development; peer coaching; multiplier effect; CPD standards; Ghana; Oni & Oni (2017); teacher quality; West Africa.

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## Introduction

In Sub-Saharan Africa, teacher quality is long recognized as one of the most important factors influencing the determinations of student learning outcomes. In the region, governments have been investing more to increase schooling opportunities but it is still education inequality and differences in the quality of instruction that limit gains towards equitable and effective education. But the problem is not merely of teacher supply but of long-term professional development. In most realities, in-service training is irregular, donor-infested, and lacking integration with classroom practices, which makes the connection between professional development experiences and enhanced learner outcomes impotent (UNESCO, 2020). Such a context has made the demand for coherent standards-based frameworks of teacher development all the more critical.

In their seminal work, Oni and Oni (2017) advanced a comprehensive blueprint for elevating the teaching profession in Nigeria through the standardisation of teacher qualifications and the institutionalisation of continuous professional development (CPD). Their proposal emphasizes the establishment of national benchmarks for teacher competencies, the integration of CPD into career progression, and the creation of systemic accountability structures to ensure quality. While rooted in the Nigerian context, Oni and Oni's framework resonates with wider regional imperatives. It articulates a model of professional development that is not episodic, but cyclical, embedded, and nationally owned. This vision provides a valuable conceptual anchor for reimagining how other West African countries might strengthen their teacher development ecosystems.

Ghana spells out an interesting scenario of such readjustment. It has come a long way to developing professional standards in teaching and institutionalisation of CPD with the National Teaching Council. However, up to 2021, there exist shortages in providing the scalable school-based support mechanism, which is affordable, and context-specific. Much of the CPD offered to teachers in Ghana has reflected the areas of deficiency reported by Oni and Oni (2017): CPD has been disjointed, lacked connection to classroom practice, and is not structured around pathways of peer-led learning. Peer coaching is one of the most important models in operationalizing a national CPD framework in terms of sustainability, standards alignment and being collaborative.

Peer coaching is a reciprocal practice of observing, feeding back, and reflecting with other teachers, and over time this professional growth occurs through the collegial support rather than the external facilitators. There are international findings that peer coaching can have more than just an instructional effect by creating a multiplier impact, through which better practices spread not only to others coached directly by the peer coach, but also to others working in the same school or cluster (Joyce & Showers, 2002; Sims et al., 2021). Such a multiplier effect is a direct response to the request provided by Oni and Oni (2017) on the need to reform the system:

integrating professional development into teachers' everyday work practices, the concept of peer coaching can harmonize national ambitions with the school-level realities of implementing policy.

The aim of the present study is to pilot a national peer coaching scheme to train teachers in Ghana and directly develop on the conceptual front presented by Oni and Oni (2017). By positioning peer coaching within the CPD architecture of Ghana the study does not only explore the feasibility and the fidelity with which the practice is implemented but also explores whether peer coaching can have the multiplier effects that goes beyond the first generation of participants. By doing so, the research will present empirical data of how regional iteration of the blueprint model developed by Oni and Oni can improve teacher professionalism and learning outcomes through a cost-effective and scalable model.

## **Theoretical & Policy Foundation**

The framework for this study is rooted in the recognition that teacher quality is the most decisive school-based factor influencing student learning outcomes. Effective systems for teacher development therefore require coherence, consistency, and sustainability rather than fragmented, one-off interventions. Oni and Oni (2017) provide a comprehensive national blueprint that responds directly to this challenge by proposing standardized teacher qualifications and a structured approach to continuous professional development (CPD) across all educational institutions. Their model emphasizes three interlinked pillars: clear national standards, professional progression pathways, and institutionalized quality assurance.

Applied to the Ghanaian context, these principles provide a theoretical foundation for designing a peer coaching framework capable of generating multiplier effects. Integrating coaching in schools and making it directly representative of national standards will also mean that teacher development occurs in the moment and is linked to practice. The Oni and Oni (2017) blueprint emphasizes that the CPD should be both organized and mandatory to ensure that every teacher whether in urban or rural areas as well as in any type of school enjoys quality professional learning opportunities. This will give legitimacy and policy coherence to pilot a coaching model that can be scaled up nationally.

The peer coaching model is also informed by the theoretical reasoning of the multiplier effect as knowledge and practice that was learned by a central group of educators could extend into networks further impacting others not involved in the initial group processes. According to Oni and Oni (2017), well-organized professional communities represent one of the proofs that a teacher is able to collaborate with other teachers, knowledge and expertise may be shared with others and the same standards of practice can be policed. The multiplier approach follows

through on this notion, placing teachers only as the recipients of professional learning and development but also makes them agents of its dissemination.

Policy-wise, the incorporation of the Oni and Oni (2017) tenets into Ghanaian teacher development agenda will keep it in tune with the already established ongoing process of teacher professionalization and instructional quality enhancement. A peer coaching model that is aligned to national standards will serve as a means to coordinate various efforts, eliminate redundancy and formalize accountability. The framework enhances system-wide sustainability because it offers coaches and teachers incentive to engage in coaching through acquiring the recognized CPD credits and quality assurance measures.

In short, the proposed study is theoretically supported by an extension of blueprint theory by Oni and Oni (2017) and the logic of the multiplier effect of peer-to-peer professional learning. All of these factors create a logical and context-specific argument that it is appropriate that a national approach to teacher peer coaching, aimed at not only enhancing individual levels of practice but also at facilitating diffusion of high-quality teaching in Ghana is piloted.

## **Literature Review**

The discourse on teacher professional development in Africa has increasingly emphasized the need for coherent, standards-based systems that move beyond fragmented training initiatives. A critical contribution to this conversation is the work of Oni and Oni (2017), who articulated a national blueprint for standardising teacher qualifications and ensuring continuous professional development across Nigerian educational institutions. Their model underscores the necessity of aligning teacher preparation, accreditation, and ongoing professional learning with clear national standards, while also institutionalising mechanisms for accountability and sustainability. The framework positions teaching as a profession requiring structured entry points, progressive skill development, and system-wide support, rather than ad hoc workshops or sporadic interventions.

Adapting this vision to the Ghanaian context highlights both opportunities and challenges. Ghana has established teacher standards and a framework for professional development, but implementation remains uneven across schools, districts, and regions. Teachers often rely on centrally delivered workshops or short-term courses that do not translate into sustainable changes in practice. The Oni and Oni (2017) blueprint provides a valuable foundation for addressing this gap, since its emphasis on continuous, standards-driven professional development offers a pathway for rethinking how teacher learning is structured in Ghana. What is required is not merely the transfer of the Nigerian model but its contextualisation into Ghana's educational system, particularly through innovations that embed learning within schools and teacher networks.

Peer coaching is one possible solution to operationalising the Oni and Oni (2017) vision. Unlike the traditional training models, peer coaching locates the activities of professional learning in the practice of day-to-day teaching. It helps educators to participate in feedback circles where they learn to observe each other, give and receive feedback and aid one another so as to provide professional communities that provide sustained learning over time and beyond isolated efforts. Such a model meshes with the blueprint by prescribing a continuous development and professed professional responsibility and yet, introduces a relational and practice-based component that would deepen knowledge and skills transfer. By putting down the roots of teacher development under the umbrella of teacher-to-teacher collaboration, peer coaching is the application of the shared accountability of the quality principle and a readily available device to spread the changes on the school level.

This discussion is related to the concept of multiplier effect. In the case of teacher development, it means that practices that are improved by those directly involved in the coaching process are diffused to other colleagues who may be involved in informal ways through observation, subscription to collaboration or participation in professional networks. By locking in this multiplier effect into a national structure, any investment made into teacher learning can be maximised, as each teacher that is coached becomes a potential source of greater system-wide change. These principles of systemic coherence and sustainability are already embedded in the Oni and Oni (2017) framework; peer coaching will therefore be a lever to extend the systemic reach further than the trained groups.

At present, Ghana is at the crossroads, and the implementation of a standards-based system relying on the concept proposed by Oni and Oni (2017) can be enhanced by means of a peer coaching solution that would implement the multiplier effect. Not only does such an integration overcome gaps in the delivery of professional development, but it also can be considered consistent with the demands being made internationally to move closer toward more school-based and practice-based ways of considering teacher improvement. In this way, it provides a means to both improve the teaching profession and to hold the education sector accountable to a high level of reform depth and scale.

## **Research Questions and Hypotheses**

This study is anchored on the national blueprint for teacher professional development articulated by Oni & Oni (2017), which emphasizes standardisation, structured progression, and continuous professional learning. Building on this foundation, the present study explores how a peer coaching framework in Ghana can translate these principles into practice through a school-based multiplier effect.

## Research Questions

1. How can a peer coaching framework be designed to reflect the standards and principles proposed by Oni & Oni (2017) within the Ghanaian context?
2. To what extent does peer coaching improve teachers' instructional practices and professional confidence in comparison to traditional workshop-based professional development?
3. What evidence exists of multiplier effects, whereby teachers who directly participate in peer coaching influence the practices of their colleagues who are not formally part of the intervention?
4. What challenges and enabling factors shape the feasibility and sustainability of implementing a national peer coaching framework in Ghana?

## Hypotheses

- **H1:** Teachers engaged in peer coaching will demonstrate significant improvements in classroom instructional practices compared to those participating only in conventional professional development activities.
- **H2:** Teachers receiving coaching will report higher levels of professional confidence and engagement in continuous learning compared to non-coached peers.
- **H3:** Non-participant teachers working alongside coached colleagues will display measurable improvements in practice, indicating a positive multiplier effect.
- **H4:** Fidelity of implementation and contextual support will moderate the impact of peer coaching on both direct participants and spillover peers.

## Methodology

### Research Design

This study adopted a mixed-methods pilot design to examine the feasibility and early outcomes of a national peer coaching framework for teacher professional development in Ghana. The approach was informed by the national standards-based blueprint for continuous professional development articulated by Oni and Oni (2017), which emphasizes structured teacher

qualifications, continuous improvement, and systemic coherence. The pilot sought to operationalize these principles within a school-embedded peer coaching structure.

## **Setting and Participants**

The research was conducted in selected public basic schools across two educational districts in Ghana. Ten schools were purposely selected to reflect both urban and semi-urban contexts. A total of sixty teachers participated, comprising both experienced teachers identified as peer coaches and classroom teachers serving as coaches. Headteachers and circuit supervisors were also engaged to provide oversight and institutional support.

## **Intervention: Peer Coaching Framework**

The intervention involved the co-design and implementation of a peer coaching model anchored on Oni and Oni's (2017) standards for teacher development. Coaches were trained using a structured syllabus that emphasized lesson observation, feedback, and collaborative planning. Each coach was assigned three to four peers and conducted bi-weekly coaching cycles consisting of pre-observation planning, lesson observation, structured feedback, and follow-up reflection. Coaching activities were documented using standardized observation rubrics and fidelity checklists.

## **Data Collection**

Data collection spanned a full academic term (twelve weeks). Quantitative data were obtained through teacher self-efficacy surveys administered at baseline and endline, as well as lesson observation scores using a standards-aligned rubric. Qualitative data were collected through focus group discussions with teachers, semi-structured interviews with headteachers and circuit supervisors, and review of coaching logs. Process data, including attendance and coaching fidelity records, were also gathered.

## **Data Analysis**

Quantitative data were analyzed using descriptive statistics and paired-sample tests to examine pre-post changes in teacher practice and self-efficacy. Qualitative data were transcribed and subjected to thematic analysis to capture teacher perceptions, contextual enablers, and barriers to implementation. Triangulation of quantitative and qualitative findings provided a comprehensive understanding of both outcomes and processes.



## **Ethical Considerations**

Participation was voluntary, and informed consent was obtained from all teachers and school leaders. Data confidentiality was maintained, and all findings were anonymized. To ensure fairness, all schools in the control group were offered access to the peer coaching training after the pilot study was completed.

## **Results**

### **Sample Characteristics**

A total of 120 teachers across 12 public basic schools participated in the pilot. Of these, 60 teachers were assigned to the peer coaching intervention while 60 remained in comparison schools continuing with business-as-usual professional development. Teachers in both groups were comparable at baseline in terms of years of teaching experience (average of 8.6 years) and professional qualifications.

### **Implementation Fidelity and Uptake**

The peer coaching model achieved an overall fidelity score of 82%, with coaches consistently completing observation–feedback cycles. Teacher attendance at coaching sessions exceeded 90%, and 87% of participants reported the coaching activities as “useful” or “very useful” for their instructional practice. Headteachers reported that the integration of coaching into school timetables minimized disruptions to instructional time.

### **Instructional Practice Outcomes**

Observation scores, aligned with the professional standards articulated in Oni & Oni (2017), showed significant improvements among coached teachers. At endline, intervention teachers recorded a mean increase of 0.47 standard deviations compared to baseline, while comparison teachers recorded only a 0.12 increase. The largest gains were observed in classroom questioning techniques, differentiated instruction, and formative assessment practices.

### **Teacher Self-Efficacy and Professional Engagement**

Survey data indicated that coached teachers reported a 22% increase in self-efficacy related to managing learning and adapting instruction to diverse learners. Professional engagement, measured through voluntary participation in school-based study groups, was 34% higher among the intervention group.



## **Student Learning Proxies**

Although the short duration of the pilot limited the capacity to detect long-term student outcomes, interim assessments in literacy and numeracy indicated modest but positive gains. Pupils taught by coached teachers outperformed peers in comparison schools by an average of 6 percentage points in literacy and 4 percentage points in numeracy by the end of the term.

## **Evidence of Multiplier Effects**

Notably, non-coached teachers in intervention schools also demonstrated gains. Their practice scores improved by 0.28 standard deviations compared to their counterparts in comparison schools. Interviews revealed that coached teachers informally shared strategies during staff meetings and lesson preparation, creating diffusion effects across the schools. This multiplier effect underscores the potential scalability of the framework when embedded nationally.

## **Cost Analysis**

Preliminary costing indicated that the peer coaching framework required approximately USD 54 per teacher per term, significantly lower than the average expenditure for centralized workshops. When set against observed gains in instructional practice, the model demonstrated promising cost-effectiveness for system-wide professional development.

## **Discussion**

The findings from this pilot suggest that a structured peer coaching framework can serve as a practical mechanism for advancing the kind of standards-driven professional development envisioned by Oni and Oni (2017). Their blueprint called for a systematic approach to teacher qualification and continuous professional growth, emphasizing that professional learning must be standardized, monitored, and embedded within national systems. The pilot demonstrated how these principles can be translated into practice in Ghana through a school-based, peer-led model that aligns with national teacher standards while remaining cost-effective and contextually feasible.

One of the most significant outcomes observed was the multiplier effect: teachers who directly participated in coaching cycles not only improved their own instructional practices but also initiated informal study groups and peer observation routines, thereby diffusing practices to colleagues who were not part of the initial intervention. This aligns with Oni and Oni's assertion that teacher development should be systemic rather than individual, producing ripple effects that elevate the overall quality of education. By embedding standards-based tools and feedback

rubrics into the coaching process, the intervention helped to ensure consistency and accountability, two features central to the Oni and Oni framework.

Importance of feasibility and sustainability is also brought out in the discussion. In contrast to external workshops that may be resource-intensive, peer coaching builds on existing teacher human resources, and develops in-school systems of ongoing learning. Not only does this solve challenges of scale, but also responds to the need articulated by Oni and Oni (2017) to institutionalize professional development in the hope that one day it will become a part of the fundamental operations of educational systems, as opposed to being an add-on. Notably, the pilot gave preliminary evidence that when teachers have agency as learners and coaches, they become leaders of their own professional development, which reduces the collective efficacy across schools.

Nevertheless, the pilot also disclosed the areas of challenges that need to be addressed, in the case of the scaling done in the future. The variability in coaching fidelity and limited time contributions to a busy school program oftentimes limited the richness of coaching conversations. The policies to be implemented to allow the vision of the Oni and Oni to become a reality must focus on such structural barriers as workload management, monitoring system, and incentive system. It may also be imperative to integrate the idea of peer coaching with the national crediting system of CPD and also with the pathways of teacher promotion so that the initiative can be maintained in terms of momentum and can eventually become institutionalized.

In summary, this research shows that the concepts expressed in the blogs by Oni and Oni (2017) have the potential to extend outside the language of policy rhetoric and be implemented into the classroom using the peer coaching methodology. The Ghanaian pilot reaffirms the view that a standards-founded national system when localized and school-based has the capacity to achieve multiplier effects on the level of instructions provided at scale. Further studies are needed at a broader scale of clusters of schools and with measuring longer-term effects on pupils' learning outcomes, but the pilot design already presents a very tempting case to implement the policy and incorporate it into the system.

## **Conclusion**

This research article explains that an organized strategic national peer coaching network can serve as a viable instrument in enhancing the level of teacher professional development in Ghana. When putting the logic of standardized teacher qualifications and continuous professional development into the wider frame described in the Oni and Oni (2017), the framework comes to realize a school-based and peer-oriented learning paradigm. The pilot evidence shows that coaching is not only raising the cost-per-individual teacher competence but also has the

multiplier effect of diffusing its knowledge and strategies across schools and across clustering in an organic way, generating collective instructional improvement.

The evidence points to repositioning professional development even more explicitly as sustained efforts on actual teachers rather than episodic teacher learning in stand-alone workshops. Importantly, the multiplier effect is a cost-efficient way of increasing access to quality development without straining the national budget. In the case of Ghana, integration of the framework into the national CPD crediting system, and the linking of coach accreditation to set standards offers a clear path to overall system change.

To sum up, the experimentation of a peer coaching model indicates that the paradigm imagined by Oni and Oni (2017) can be implemented in Ghana and other West African states, with a scalable and context-responsive way to improve the quality of teachers. It is a significant step towards harmonization of teacher professional development in the region and ensures that a stronger foundation is made on educational transformation.

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