PROFESSIONAL LEARNING NETWORKS IN ACTION: LESSONS FROM EAST AFRICA

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EXECUTIVE SUMMARY

INTRODUCTION

The Aga Khan Foundation Canada and Global Affairs Canada supported a five-year project to strengthen teacher education and support systems to improve learning outcomes in literacy and numeracy at pre-primary and primary school levels in target areas of Kenya, Tanzania and Uganda (Strengthening Education Systems in East Africa - SESEA[1]). The Aga Khan Academy, Mombasa provides high quality professional development programs for practicing teachers through the Academy's Professional Development Center (PDC). The PDC has extended its outreach programs for practicing head teachers and classroom teachers through the creation of four professional associations:

- Mombasa Educational Leaders Association (MELA), established in 2010
- Kwale Educational Leaders Group (KELG), established in 2012 in the rural county of Kwale
- English Language Teacher Association (ELTA), established in 2010 and located in Mombasa
- Mathematics Teacher Association (MTA, established in 2014 and located in Mombasa

These associations are composed of PDC alumni who are organized in school clusters that typically meet monthly during the school year as professional learning networks (PLNs).

THE RESEARCH STUDY

This study examines five research questions: (1) the activities of participants in the PLNs; (2) network leadership; (3) participant outcomes; (4) impact in PLN member schools; and (5) factors related to sustainability of the networks. The study employed a multi-method qualitative research design. It was implemented between September 2015 and March 2017, including three two-week field trips to Kenya. Data included document analysis, 83 individual and four focus group interviews, 19 observations of monthly PLN cluster meetings and monthly association meetings and 24 classroom observations.

PLN Goals, Participants and Activities

PLN Goals

Interviews with PLN members suggest three main PLN goals:

1. *Build a professional network of learning and support.* PLN members claimed that important learning can be gained from not only sharing successes, strengths and ideas, but also through sharing the challenges they face in their classrooms and schools.

2. *Build and apply professional knowledge and skills*. Members of the teacher PLNs emphasized growth in their teaching knowledge, skills and attitudes as a key goal. School leaders highlighted the development of leadership and management knowledge and skills as a goal of their PLNs.

3. *Support change and improvement in student learning.* PLN members from all the networks signaled improving academic performance of their students as a key goal of PLN activity.

PLN Participants

Graduates of the four core PDC programs are automatically granted membership in the respective school leader and teacher PLNs. Participation in the teacher programs and networks is mostly female, consistent with the demographics of teachers in Mombasa primary schools (however, the school leader PLNs are more mixed). PLN members reported challenges to participation in PLN meetings that clustered in four major categories: *workload*, *scheduling*, *distance and transport*, and *personal issues*.

PLN members attributed their motivation for participating in PLN meetings and activities primarily to *benefits to professional practice* (e.g., finding solutions to problems of practice) and *benefits to professional attitude* (e.g., more confidence in and commitment to their work as teachers and school leaders). PLN members cited the *economic benefits* of participation (the PDC incentivizes participation in PLN cluster meetings and monthly association meetings through funding for transport and tea), though benefits to practice and professional attitudes were the primary motivators.

PLN Topics and Activities

The main topics of discussion in teacher cluster meetings centred on *pedagogical practice, class management, English use, learning materials, and government education policies*. PLN teachers share experiences and engage in mutual problem solving during cluster meetings; however, observation of a sample of these meetings suggests that these activities are often superficial. Challenges may be named without problematizing the contexts and causes; solutions may be suggested without debating their feasibility or effects (or without any commitment to next steps); and activities can be proposed without any clear learning objective for the participants.

Some PLN school leader cluster meeting topics were common to those named by teachers, including teaching and learning practices and English language use in schools. However, in contrast to teachers, the school leaders reported that they often talk about student academic performance in their schools, particularly with reference to student performance on KCPE exams. School leaders also said they discuss leadership practices for themselves and for those who assist them in managing the school. Several other important differences between teacher and school leader PLN meetings were noted:

- *School leader cluster meetings were longer and happened during the school day*. Head teachers have greater control over their time, which also allows them to engage in more detailed discussions and planning than in teacher PLN meetings.
- *School leaders shared a broader range of issues, challenges and experiences than members of teacher clusters.* These included student performance, student behavior, teacher development, school leadership practices, teaching and learning resources, and parental involvement.
- *School leaders more commonly engaged in joint plans of action across schools within their clusters* (including neighboring schools).
- *School leaders claimed that they reflected on the implementation and impact of prior cluster interventions*. There was little evidence of teachers reflecting on the effectiveness of activities.
- *School leaders demonstrated a strong emphasis on addressing concerns about student academic performance*. This included identifying focuses for improvement linked to academic results and planning cluster-wide teacher development and student learning activities based on the findings.

- *School leader PLNs used protocols for event planning and strategic planning* acquired in their PDC training programs. These leadership tools and skills were not so strongly in evidence in teacher network meetings.

Overall, school leaders have access to school resources and the power to make decisions for their schools and in collaboration with other schools that teachers in the teacher networks do not have.

Gender in Teacher and School Leader PLNs

Interviews with both teachers and school leaders suggest that gender has not been a frequent topic for discussion in the PLNs as it relates to student engagement and learning in their schools, nor in relation to male and female participation and interaction in the PLNs themselves. For example, in one school leader cluster meeting, the members discussed the challenge of dealing with and trying to teach "adolescents" (e.g., truancy, drug use); however, no distinctions were made between female and male adolescents and the unique educational challenges associated with these different groups. Most teacher and school leader interview participants suggested that women and men engaged equally in PLN activities. A common gender-related challenge identified by teachers was the low number of male teachers at the primary level, in particular with regards to achieving a gender balance in the clusters.
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PLN Leadership

Leadership in the PLNs occurs mainly at the association network level and the network cluster level. There is also an inter-network PLN Executive Committee that meets monthly at the PDC to share reports of PLN activities, to set a common annual schedule of PLN meetings, and to plan some major joint activities together, such as an annual conference. There is little communication or coordination between the school leader and teacher PLNs beyond the Executive Committee meetings.

PLN Association Leadership

Network association leaders (chairs, secretaries, treasurers) are elected for two-year terms by the members of each network The PLN leadership teams meet with cluster leaders and the general membership at PLN monthly meetings during the school year. A major portion of the meetings is devoted to cluster reports from the field. We did not observe any extended large group discussion about activities reported, nor any problem solving around challenges reported from any of the clusters. These association level meetings do serve an important overall community building function for members of the networks.

PLN Cluster Leadership

Each PLN cluster has a chair and a secretary nominated and elected by the members of the cluster. The period of office varies across the PLNs from one to two years. Cluster leaders from all the PLNs reported that they received no formal orientation, training, or coaching to enact their roles as cluster chairs when they were elected. The reported and observed role of cluster network leaders included: (1) setting the agenda and managing logistics; (2) communication and motivating others; (3) sharing responsibilities; and (4) recordkeeping (e.g., meeting minutes and attendance).

Cluster leaders from the two longest standing PLNs (ELTA and MELA) emphasized the challenge of communicating with and sustaining the participation of graduates from earlier PDC cohorts, as the number of potential members grows with each cohort and as older members drop out. Leaders from MTA and KELG spoke less about the challenges of encouraging participation than about practical

constraints of personal time and resources that hinder PLN work. One identified breaking down traditional cultures of teacher seniority as a challenge for teacher sharing within her cluster.

PLN Participant Outcomes

We analyzed two dimensions of individual outcomes of PLN participation for PLN members: professional practice and professionalism (confidence, norms of collaboration, commitment to teaching and leadership, attitudes towards ongoing professional learning).

Teacher Outcomes: Professional Practice

Teacher PLN members highlighted four dimensions of impact and change in their classroom practice, including:

- *changes from traditional teacher-centered instruction to teaching methods that are more student-centered and activity-based*, including small group work and the use of learning materials;
- *implementing more differentiated instruction* to accommodate variation in student learning styles;
- *taking time to listen to students with learning and behavior problems* before acting; and
- *investing more time in lesson planning and preparation* to incorporate these changes.

In our classroom observations PLN teachers demonstrated greater expertise employing small group work, using low cost learning materials, and applying teaching strategies to encourage active learning and student engagement than comparison teachers who had not been trained at the PDC and were not members of the networks. Teachers had difficulty attributing impact on teaching and learning directly to participation in PLN activities. The effects of participating in cluster meetings and PLN activities were mostly described as *reinforcing* the use of ideas and practices learned originally in their training.

Teacher Outcomes: Professionalism

Like the outcomes on professional practice, it is difficult to attribute the reported professionalism outcomes to teacher involvement in PLN activities independent of their PDC training programs. It is more appropriate to think of PLN participation as reinforcing, sustaining and enhancing the impact of their initial training on teacher professionalism.

Many of the teachers reported that their confidence as teachers had strengthened in terms of increased *professional knowledge and skills* and increased *professional communication* because of their participation in the initial training and in the PLNs. In regards to professional knowledge and skills, the teachers talked of feeling more confident in their ability to solve problems of teaching and learning in the classroom due to interaction with peers in their PLNs. Opportunities to engage in professional communication about their classroom practices gives teachers greater certainty about what they do.

Active PLN teachers value opportunities for professional collaboration with other teachers not only because it boosts their confidence as teachers. They have come to see teacher-teacher collaboration as a professional norm, what good teachers do! Greater confidence in one's professional knowledge and skills creates more openness to communication and collaboration with colleagues, and vice-versa.

PLN participation has contributed to a sense of greater commitment to teaching as a vocation. Some teachers said that participation in the training and PLNs transformed their sense of professional identity. They came to view themselves as professional teachers, whereas before they viewed teaching merely as a job that they took because they had no choice. Other teachers claimed that while they were already committed teachers, their pre-existing commitment was strengthened through these experiences.

School Leader Outcomes: Professional Practice

Head teacher PLN members identified three categories of outcomes related to professional practice:

(1) *School management practice*s – School leaders spoke of modest improvements in basic managerial practices as a learning outcome (time management, running staff meetings, creating school activity schedules, supervising teacher attendance, and managing teacher conflict).
(2) *Instructional leadership practices* – School leaders strengthened their ability to monitor teacher compliance with curriculum and lesson planning expectations, to organize teachers' joint in-service development and to facilitate teachers' individual teacher development through teacher collaboration and classroom observation and feedback.
(3) *Improved parent relations and involvement* – School leaders reported that they were better able to address parental concerns about infrastructure and facilities, student behavior, student learning, as well as parents' attitudes and behavior towards teachers in the schools.

Although only a few school leaders referred explicitly to their use of *strategic planning and of action research* when asked about the impact of PLN work on their professional practice, both practices were strongly evident in the talk and work of those attending the meetings observed.

School Leader Outcomes: Professionalism

Participation in PLN activities affected three dimensions of school leaders' professionalism. It increased their *confidence in their ability to effectively manage the school and to lead improvements in teaching and learning*; it led school leaders to view professional learning as *an ongoing dimension of their professional work*; and it strengthened their *commitment to their careers* as head teachers.

PLN School Context and Effects

School Organizational Context

Head teachers' PLN-related teacher activity in their schools clustered into four key ways:

1. *Support for PLN participation* in PLN cluster meetings and other PLN-related activities. This is essential: sometimes teachers require the permission of head teachers to leave schools during working hours to participate in PLN meetings and activities;
2. *Providing resources* that teachers need to enact PLN inspired English and mathematics activities;
3. *Encouraging PLN teachers to practice new instructional methodologies* they learned in the PDC training and through their network activities;
4. *Encouraging and facilitating collaboration* between PLN teachers and with other teachers.

Without support from head teachers, it seems less likely that network teachers would sustain their use of new methods or engage in outreach to other teachers.

Student Effects

In their interviews, teachers and school leaders highlighted three main categories *of impact on student participation and learning* associated with the work in the PLNs:

- *Learning behaviors (active learning, group work, materials use, peer tutoring, student voice);*
- *Student engagement (enjoyment, interest, participation, discipline and attendance)*
- *Student performance (mean scores, English language proficiency)*

Participation in the PLNs reinforces and supports implementation of new teaching methods acquired in training that result in changes in student learning. Teachers attribute behavioral evidence of greater student engagement in learning to the use of these non-traditional instructional methods. The sequential causal logic is that teacher training and implementation support through teacher networks leads to changes in teaching and learning methods, greater student engagement, and ultimately, improvement in student learning outcomes. Evidence on student effects in this study is anecdotal and comes from PLN member interviews. The study did not include independent student outcome measures.

System Context and Sustainability

PDC Support

Direct intervention by the PDC in the management and implementation of the PLNs has been gradually and intentionally decreased to reduce dependency on the PDC for sustainability. PLN members and leaders highlighted the continuing importance of PLN ties to the PDC in terms of legitimating and recognizing PLN activities internally and with education authorities.   They talked about the positive influence of the involvement of the PDC on member motivation and ongoing participation. PLN teachers and school leaders felt that active communication with the PLNs and monitoring of PLN activities by PDC staff instilled a sense of accountability into PLN members. Teachers, unlike the head teachers who have greater access to resources, identified continuation of PDC funding as important for sustainability.

PLN Sustainability Challenges

In addition to the challenges of workload and maintaining communications with members previously highlighted, three significant challenges to PLN sustainability exist:

1. *Group dynamics within the PLNs* - admission into the networks by annual cohort group from PDC programs has contributed to group dynamics problems in the PLNs (some members identify and interact more with their cohort members than with the PLN in general).
2. *Official reward for participation in the PLNs as a form of educator professional development* - at present no official recognition by school system authorities is given to network participation.
3. *Integration of the PLNs with other school system organizations* - the relationship of the PLNs, their goals and activities to government initiatives and to the priorities and actions of other professional groups in the education system deserves explicit and strategic discussion.

The challenges to sustainability raised here are further highlighted in the recommendations section below.

REFLECTIONS AND RECOMMENDATIONS

Our research led to a set of 12 reflections on the research findings and corresponding recommendations to strengthen the networks as professional learning and school improvement organizations. They are grouped into the themes of *professional learning, knowledge mobilization*, *network leadership and organisation*, and *integration with the school system*.

Professional Learning

1. *Deepening teacher learning and expertise*

The findings provide evidence that teacher participation in the PLNs has significantly influenced teacher implementation of teaching and learning methods introduced in their PDC training. The extent to which PLN participation has contributed to *further* development of teacher expertise in the use of these methods seems limited. That potential could be exploited more intentionally.

2. *Strengthening the bias for action towards learning*
The PLNs provide a context in which teachers and school leaders can identify challenges of practice in their classrooms and schools, and together generate, implement and reflect upon the impact of local solutions to those challenges. We found a strong *'bias towards action'* in the PLNs that is not accompanied by as strong a '*bias towards learning'* from those actions. We recommend thinking about how to strengthen the networks as professional *learning* networks.

3. *Balancing learning of innovative practices with improvement in traditional practices*
The PLNs provide a context for both strengthening the use of innovative practices and well as enhancing the use of traditional practice, but that part of the discussion should always be to question and problematize the use of those beliefs and practices, both old and new.

4. *How to support more action research on a wide-scale basis*
In the school leader PLNs, we heard about head teachers carrying out action research studies with their teachers. We did not hear about this happening in the teacher PLNs. Teachers can engage in action research individually and collaboratively; however, this is difficult and expensive to accomplish. One possibility may be for the PLNs to collaborate with the PDC to seek funding to support action research as a strategy for strengthening professional learning through the networks.

Knowledge Mobilization

5. *Banking and mobilizing knowledge about what works*
Establishing a mechanism and a publicly accessible "space" for documenting and storing what PLN members are learning through their professional activities would help benefit stakeholders in the wider Kenyan education system.

6. *Strengthening the professional learning potential of outreach activities*
There is evidence that the PLNs are actively reaching out to other classrooms and schools to share what they have learned. However, what they have learned cannot simply be transferred to others through verbal presentations or one-shot demonstrations. The PLNs might benefit from further professional learning about principles and strategies of effective professional learning accompanied by problem solving about how those strategies could be practically enacted.

Network Leadership and Organization

7. *Investing in network 'system leadership' training.*
Cluster and PLN leaders all spoke about the about the absence of any formal training and induction when they take on the roles of cluster and network leaders. Ideally, system leadership training would be carried out by professionals with successful experience leading networks.

8. *School networks as an alternative to individual networks*
Cooperation between the networks could be strengthened. One possibility could be to reconfigure the school leader PLNs as school networks rather than individual leader networks, and to strategically affiliate the teacher networks in a formal way to the school networks. This could have the advantage of stimulating and enhancing coordination and coherence in goals and activities across the networks. Modest membership fees for the networks might be collected at the school and individual levels to help the teacher networks access school network resources.

Integration with the School System

9. *School system recognition and reward for PLN participation.*

    The professional motivation for joining and remaining active in the PLNs would be enhanced by formal recognition and accreditation of participation in the PLNs. Implementation of this recommendation would require procedures for accrediting professional learning activities associated with the work of the PLNs, as well as the kinds of evidence of learning that individual members could incorporate into professional portfolios.

10. *Expanding membership in the PLNs*

    Increased membership in the PLNs is not guaranteed; some PDC alumni do not actively participate in the PLNs after their graduation. Consideration might be given to free membership during the year after graduation as an incentive to join and participate, after which continued membership would require some modest membership fee that would provide some internal funding to sustain the PLNs. Another issue is whether the criteria for entry into the PLNs should continue to be restricted to PDC graduates. Sustainable support for the PLNs within the education system depends upon their relationship with other stakeholders beyond AKAM. We believe that discussion about alternative paths to entry and membership in the PLNs should be undertaken.

11. *Partnering with the education system*

    The long-term sustainability of the PLNs as professional organizations will require them to develop and strengthen their own relationships with other organizations in the system. However, the PLNs should not become the 'implementation arm' for external initiatives and priorities. This is a balance that will need to be monitored and negotiated to preserve the integrity of the original vision of the PLNs as vehicles for continuous professional development and school improvement.

12. *Strengthening professional community in schools*

    The potential for learning and for school improvement is greater when participants in networks are linked to strong professional communities in their home schools, rather than participating as individual professionals. An important direction for development of the PLNs would be to work collaboratively with schools and school system authorities to strengthen the presence of professional learning communities in schools associated with the networks.