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A CARIBBEAN-BASED MODEL OF LITERACY LEADERSHIP

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The study sought to evaluate the extent to which an online course in literacy leadership appropriately trained prospective literacy coaches, already situated in Caribbean schools, to assume roles as literacy leaders in their respective contexts. A secondary aim of the study was to evolve a research-driven model of literacy leadership suited for guiding the training and school-based practice of literacy coaches across the islands of the Caribbean. Having exposed the 60 graduate-level literacy leadership candidates—spanning 10 Caribbean islands—to four research-driven learning modules centred on key attributes and processes of effective literacy-focused schools, the researchers sought to immerse teams of candidates in activities cited in the research as crucial in instituting these attributes and processes in schools. A combination of qualitative and quantitative analysis of problem-based text interactions surrounding these activities, as well as candidates' own post-course ratings of course content was used to answer key research questions. Did candidates gain an overt understanding of what is involved in establishing an effective literacy infrastructure in schools? Was a viable training model used? The research affirms the efficacy of innovations geared at training literacy practitioners online across the islands of the Caribbean.

Introduction

The study sought to evaluate the extent to which 60 literacy leadership candidates in an online literacy leadership course exhibited awareness of core principles and processes involved in implementing a research-based literacy leadership infrastructure in Caribbean schools, and whether they—after being exposed to the research on exemplary literacy leadership—perceived the course as having addressed necessary principles and processes. In so doing, the course developer and researchers opened up their practice as text, while assessing candidates' level of preparedness to assume roles as literacy leaders in their respective contexts. A secondary aim of the study was to evolve a tentative model of leadership operations suited for guiding the training

and school-based practice of literacy coaches across the islands of the Caribbean, based on observation of candidates' interaction in school-based problem-solving situations.

Leadership of Literacy Instruction, a course offered through the Open Campus of The University of the West Indies (UWIOC), aimed at guiding strategically positioned practitioners in transforming literacy practices in the schools in which they worked. Participants learned to apply principles and procedures for (a) selecting teams of competent professionals to guide a school's literacy and academic programme; (b) conditioning the school environment so that the necessary supports are available for literacy improvement; (c) establishing a core set of beliefs on which schools can build a vision of successful literacy instruction; (d) establishing an affordable and sustainable professional development system to undergird and support a school's literacy programme; (e) building and sustaining a comprehensive, data-based literacy instructional and assessment system; and (f) monitoring and assessing the programme in order to strengthen advocacy for improvement.

A key assumption undergirding the course and central to the study is that instructional leaders in schools experiencing sustained literacy learning success create literacy-focused climates in which improved literacy outcomes, toward which all parties work, are perceived as prerequisites for attaining academic improvement goals in general (McAnuff-Gumbs & Verbeck, in press; Murphy, 2004, 2007). Research indicates that schools experiencing sustained student literacy improvement and continuous academic growth are typically organized with educators working together in collaborative problem-solving teams—often referred to as professional learning communities (PLCs)—in seeking solutions to institutional dilemmas as they arise. Such schools feature an infrastructure built on specific attributes that account for their success. Attributes include a system of shared, supportive leadership surrounding literacy teaching and learning; shared visions, missions, policies, and goals regarding what literacy instruction should look like and what key student outcomes should be; sustained continuous inquiry into practice to determine teaching-learning strengths and needs; an unwavering focus on student learning; context-embedded, collective professional learning and application of learning targeted at those who must deliver literacy instruction; supportive social, political, and technical conditions (Alberta In Praxis Group, 2006; Annenberg Institute for School Reform [AISR], 2004; Fullan, 2006; Hord, 1997; Kruse, Louis & Bryk, 1994; Talbert 2010).

Since attributes do not emerge in a vacuum, successful schools tend to institute specific key processes that lead to the emergence of such

attributes. Processes involve establishing structures for changing the way people think and act in seeking to bring about transformation. Practitioners working toward school improvement, especially in schools tied in dysfunctional cycles of failure, must examine and perhaps rethink, among other things, the way they perceive students and the context from which they come. The schools must also undertake in-depth scrutiny of the context in which they operate, their perspective on teaching-learning possibilities, and what they view as viable means of achieving success (Servage, 2008).

Traditionally, school leaders and policymakers have relied on teacher training institutions to prepare practitioners capable of moving schools forward, especially in the area of literacy—reading and writing improvement, with attention to oral, visual, and technological communication. This has been quite evident in the last decade or so; in mandates from the Summit of the Americas in Quebec, Canada in 2000; in resultant literacy-centred initiatives such as the Caribbean Centre of Excellence for Teacher Training (CCETT), instituted in the early 2000s and continued by various governments for eight years; and in position statements from professional organizations such as the International Reading Association. CCETT represents the most visible, the most highly funded, and the most wide-reaching effort on the part of policymakers and teacher educators Caribbean-wide (working in partnership with schools) to train both in-service and pre-service teachers for changing literacy outcomes in schools. The project focused primarily on changing instruction and the classroom environment, and adopted a model based on "clinical supervision provided by the team of 'multi-faceted' education specialists" external to school contexts (Dye, Helwig, Lambert, & Marshall, 2008, p. 63). While principals and teachers made largely unsupported claims regarding the project's impact on student performance, the final project evaluation report revealed issues such as "significant disconnect between the teachers' perception of the project and the principals' description," teacher inability "to identify with [the] school improvement plan" developed by principals also trained in the project, teacher non-attendance at workshops, teacher difficulties in "interacting with peers for training purposes," and "counter-forces within the community" (p. 63). There were requests at the end of the project for "future teacher training to include the social dimension" as well as training in school management and in "how to change behavior" (p. 63). There were also speculations as to whether removal of clinical supervisors would "affect teacher/educator and general school performance" (p. 63). Thus, sustainability of efforts was also an issue.

It is little wonder then that DuFour (DuFour & Jolly, 2007) expresses frustration with the implementation of literacy leadership structures in schools, as well as deep pessimism regarding the role that teacher education institutions can truly play in producing leaders with the appropriate mindset and the propensity for instituting and sustaining comprehensive, research-driven literacy instructional improvement initiatives. As DuFour, a leading voice in school-based literacy leadership maintains, "I don't think we can wait for higher education to foster PLC concepts" and "teachers are unlikely to find it" in their training (DuFour & Jolly, 2007). Kwakman (2003), as well as Murphy (2007), support DuFour in this, demanding research attention to the quality of teacher training in literacy leadership. Powell and Rightmyer (2011) maintain, however, that even when teachers are appropriately trained (and the writers claim that they are), they enter schools that refuse to do so and, ultimately, lose their verve as change agents. Researchers maintain that leaders should be trained, not just as agents of instructional behaviour change, but also as changers of practitioner thinking. Owen (2005), as well as Costa and Garmston (2002), maintains that an understanding of teacher thinking, perspectives, and action is needed if teacher and school transformation are to be realized.

Given recent controversy as to where problems of implementation truly lie, Feger and Arruda (2008) underscore the need for research scrutinizing the "pre-service participation [of] both teachers and instructional leaders" in PLCs, and an examination of the "design of online professional development courses," especially those that report on observation of teachers as they engage in school transformation processes (that is, in operations implemented to change the way educational work is conducted in schools), so as to ensure that literacy professionals are being inducted into key PLC processes in schools and training institutions (p. 18).

A somewhat unique characteristic of the UWIOC's Masters in Literacy Education is that candidates fulfil both criteria, that is, as school-situated professionals at the leadership and instructional level, and as candidates working on improving their own expertise in literacy. As a response then to demands for scrutiny, the study examined practices in this online literacy leadership course to ascertain whether the course appropriately inducts candidates into key leadership concepts and processes in a comprehensive manner, whether there is appropriate uptake of principles and practices by candidates, and whether a tentative training model could be derived, were it found that candidates were in fact sufficiently exposed to the requirements.

In an era where universities and colleges seek to position themselves as both teacher education institutions and preferred professional learning providers, such scrutiny is essential. Additionally, evolving models that can work for both training and school action is an effective way to ensure relevance of training for the context of work.

The Setting of the Study

Leadership in Literacy Instruction was delivered over a 15-week period via *The Learning Exchange*, UWIOC's rebranding of *Moodle*. Primary learning content comprised four online learning modules spanning a 12-week period. Three additional weeks were allotted, so that there was an initial one-week orientation and two weeks for completion of a final project. Each module centred on at least one key attribute of PLCs and comprised three units—one on the attribute and related concepts, one on research-based procedures for establishing that attribute, and the last on practical tasks related to instituting the attribute. A learning forum was attached to each of the three units in a module, but only the last of the three—the one featuring cased-based problem solving—was graded.

The first module addressed the context of literacy leadership, detailing the history of literacy instructional leadership in the Caribbean, and the realities of resistance to the new roles that relatively young literacy professionals must play; much of which can appear on the surface to go against the norms of autonomy and seniority that have characterized schools. Candidates explored principles of effective change leadership, and were guided in means of using the collective commitment statements and other techniques to establish a culture of literacy in schools, and to prepare school personnel for changes in outlook on literacy teaching and learning. Students learned approaches for "reculturing" a school so that a culture of literacy emerges, and so that a healthy, collaborative climate is facilitated. One major assignment required candidates to develop commitment statements for their context, using research-based procedures.

The second module addressed shared leadership, and guided candidates in developing and sustaining a literacy leadership team to lead a school toward instructional improvement. Candidates learned the key characteristics of effective schools and how such characteristics are linked to a specific type of leadership and to specific approaches to instructional change. They explored the roles of the leadership team, including its data scrutiny, planning, and training function, and learned to gather a plethora of data on teacher and student performance, perceptions and values, and to use insights as the basis for taking and evaluating

action. Students then engaged in leadership problem-solving conversations in the forums and, subsequently, in an online data retreat and follow-up activity. They perused school data and developed comprehensive strategic action plans that addressed the needs of all learners and which took school structures and conditions into consideration.

The third module addressed continuous professional learning as grounded in the research on effective adult learning and effective professional development practices. Students learned to design a continuum of supports for teachers and, in the learning forum, problem solved teacher resistance issues. Candidates then developed a comprehensive professional development plan (PDP) that took a collective and insider perspective on coaching, giving due consideration to contextual issues that may arise.

The fourth and final module addressed programme evaluation and revitalization, showing how attention to the notion of the total literacy system from the outset can ensure that all variables are considered in planning for improvement and in evaluation outcomes.

Video vignettes dispersed throughout the modules presented authentic situations in which schools facing specific dilemmas linked to literacy leadership, teacher resistance, and student literacy performance overcame such challenges. Candidates could draw on both module and multimedia content for insights as they problem-solved in the learning forums. Generally, either the group facilitators or course coordinator provided the prompts to trigger discussions, but for graded discussions, cases were collectively developed by instructors. Still, only the group facilitators (not involved in this research project) graded these four forums. As is typical in graded discussion, a Question-and-Answer Forum was used so that students had to post an initial comprehensive response (which would be the focus of grading), before they could view and respond to the posting of their peers.

No research-related manipulation of course activities took place before or during delivery, and the study was done as a reflective exercise. The study was driven by the following research questions:

1. *To what extent did candidates believe the course addressed core leadership attributes and processes?*
2. *To what extent is awareness of attributes and processes evident in problem-based conversations in key learning forums?*
3. *What model of literacy leadership interaction can observation of candidates' problem-based conversations reveal?*

Review of Literature

Approaches to school literacy leadership in the Caribbean have typically adopted a top-down, outside-in approach, although in recent times, a train-the-trainers approach has been more common (Dye, Helwig, Lambert, & Marshall, 2008). In the latter approach, individuals, usually lecturers situated in teacher training colleges and external to school contexts, are designated trainers who work to increase the instructional competence of both pre-service and in-service teachers, especially in the use of evidence-based, literacy instructional practices (those practices grounded in large-scale empirical research as well as in knowledge of a school's clientele). Having being trained, candidates and classroom teachers would then train other teachers, and even students, to implement selected instructional and assessment practices (Hillard, Davies, & Griffith, 2009). This model—one that drove the CCETT initiative for approximately eight years—adopted a training strategy much like the Teaching Learning Instrument (TLI) approach advocated by Rosemary, Roskos, and Landreth (2007), which involves both workshop and embedded support in selected classrooms.

Current literacy instructional leadership practice, with its emphasis on instructional coaching and vision leadership, has taken a somewhat different approach to school literacy improvement. PLCs, implemented in a context featuring shared leadership, are currently favoured as the most viable context for strengthening school leadership structures, fostering teacher professional growth, and improving student learning outcomes, especially in literacy (DuFour & Jolly, 2007; Fullan, 2006; Richardson, 2005). PLCs (also known as communities of continuous inquiry and improvement) are seen as potent structures for addressing student literacy learning challenges, while simultaneously augmenting teacher knowledge of the requirements of evidence-based practice.

Advocates of the PLC model of literacy leadership and school improvement reference a significant evidence base linking PLCs to enhanced school professional climate and governance (AISR, 2003; Berry, Johnson, & Montgomery, 2005; Hollins, McIntyre, DeBose, Hollins, & Tanner, 2004; Hord, 1997; Phillips, 2003); improved teacher expertise (Andrews & Lewis, 2002; Dunne, Nave, & Lewis, 2000; Englert & Tarrant, 1995; Hollins et al., 2004; Louis & Marks, 1998; Strahan, 2003); and increased student achievement (Berry et al, 2005; Hollins et al., 2004; Strahan, 2003). Notably, a focused collection of studies has proven that PLCs, when properly implemented, account for up to 85% of the variance in student achievement after variables such as grade level and student background are accounted for (Louis & Marks,

1998; Supovitz & Christman, 2003). DuFour (DuFour & Jolly, 2007) provides a catalogue of studies demonstrating positive impact, and which provide essential attributes of PLCs believed to cut across sociocultural boundaries to promote student literacy learning success. Educators are admonished to shake off the culture of isolation that has traditionally characterized their profession, and to form teams in which they can more effectively scrutinize their practice, ferret out the root causes of challenges experienced by schools, derive collective solutions that more closely align their practices with the research, and, ultimately, achieve school, programme, and student success.

The idea seems logical enough; if school principals shake off their traditional "knight in shining armour" conception of literacy leadership and, instead, focus on pooling the intellect and expertise of all in effecting school instructional change, then teaching-learning transformation is possible. A key assumption behind the PLCs movement, derived from current adult learning and professional development research, is that initiatives which adopt an emic (insider) perspective; which are collaborative in nature; and which involve ongoing inquiry, problem solving, and thoughtful, supervised action embedded within the context of authentic educational practice, have a greater likelihood of success than do fly-by training initiatives delivered by those external to the school context (Darling-Hammond & Loewenberg-Ball, 1998; DuFour & Jolly, 2007; Hurd, & Licciardo-Muso, 2005; Kern, 2009; Robinson, Hohepa, & Lloyd, 2009; Senge, 1990).

What though are the essential features of PLCs, and what operation should be instituted to ensure their establishment? Are core elements embedded in the course? What is the extent of student uptake of the attributes and processes? Can student uptake and use of PLC processes be diagrammed?

A Framework for Exploring Key Attributes of Literacy-Focused Schools

In successful schools, PLCs involve more than groups of teachers and coaches or master teachers working to change classroom practice (a frequently-used definition). Stoll, Bolam, McMahon, Wallace, and Thomas (2006) provide a more expansive definition of a PLC, describing it as "a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learner-oriented, growth-promoting way" (p. 223). A body of evidence indicates that PLCs feature more than teacher teams and that, in fact, successful

schools are organized as PLCs at both the macro and micro levels (Birenbaum, Kimron, Shilton, & Shahaf-Barzilay, 2009). Talbert (2010) maintains that schools themselves are PLCs, and that more effective schools feature specific attributes which explain their success in developing student literacy abilities. Table 1 presents the crucial attributes of effective literacy-focused schools, and the research supporting their impact. This outline lends credence to the elements used to guide student rating of course content.

Table 1. Framework for Surveying Core Attributes of Effective Literacy-Focused Schools

Supporting Research on the Attributes of Effective Literacy-Focused Schools		
Key Attributes	**Description**	**Supporting Empirical Research**
Shared Leadership	Successful schools sustain a system of shared, supportive leadership to guide the schools toward desired literacy targets. Leadership is typically rooted in a shared social philosophy (e.g., democratic participation so that principals as well as faculty can assume leadership of teams).	Hallinger & Heck, 2010; Knapp, Copland, Honig, Plecki, & Portin, 2010; Louis, Leithwood, Wahlstrom, & Anderson, 2010
Shared Commitments	Successful schools generate and are guided by shared visions, mission, and policies regarding what instruction should look like and what key literacy outcomes should be. Such commitments ensure an undeviating focus on set targets.	Bottoms & Schmidt-Davis, 2010; Helm, 2007; Wallace Foundation, 2012
Continuous Collective Inquiry	Successful schools maintain a focus on student learning and undertake continuous cycles of inquiry into educational practices. Both data-driven scrutiny and reflective dialogue are valued.	Honig, Copland, Rainey, Lorton, & Newton, 2010; Little, Gearhart, Curry, & Kafka, 2003; Marsh, Sloan McCombs, & Martorell, 2010
Continuous Professional Learning	Successful schools facilitate continuous professional learning and application of learning by both administration and faculty. De-privatization of practice and interdependence are considered essential.	Antoniou & Kyriakides, 2011; Biancarosa, Bryk, & Dexter, 2010; Castle, Arends, & Rockwood, 2008; Vernon-Dotson & Floyd, 2012
Supportive Conditions	Successful schools ensure that supportive social, political, and technical conditions surround improvement attempts. Physical and human capacities are built and sustained.	Leithwood, Steinbach, & Ryan, 1997; Muijs & Harris, 2006

Both the existence of and strength of PLCs in the school setting are important. Several longitudinal studies demonstrate that student achievement tends to vary according to the strength of a school's PLCs, and according to whether the focus of PLC efforts is on all or only some of the above-mentioned attributes. In addition, work on the evolution (life cycles) of PLCs show that while strong, mature, and effective PLCs tend to feature all five attributes, those in the initiation phase tend to focus on vision, values, and norms; and those at the implementation phase focus on student achievement and high expectations (Huffman & Hipp, 2003). Institutionalized PLCs are more likely to ensure that the social philosophy (vision and focus) of a school guides both teaching and learning. It would be interesting to determine whether this evolution is as clear-cut in schools with PLCs operating at different levels simultaneously or in schools with only one core team moving through a sequence of steps. Such exploration must await evolution of a workable multilevel framework of PLC operations suited for guiding empirical research, a key focus of the current study.

A Framework for Exploring Core Leadership Processes

Several models that present key instructional leadership processes exist, each varying in the extent of attention given to the five key attributes as outcomes. The Annenberg Institute for School Reform (ASIR, 2003) PLC model, derived from research in 18 challenging schools, stresses *result-oriented or instrumental processes*, and presents the literacy leadership structure as primarily a tool of accountability put in place to measure and improve learning outcomes by changing teacher practice. Servage (2008) rejects this narrow conceptualization of PLCs, indicating that a focus on "patching up" instruction (*re-formation)* does not facilitate transformation, and that teacher change under this perspective is merely cosmetic. *Transformative thinking* (a focus on changing what educational practice *is*) should form the crux of literacy leadership action so that more than surface changes occur. *Transformation* involves deep, system-wide scrutiny and in-depth critical reflection targeted at the entire school infrastructure as well as wide socio-political realities. Servage claims that because it encourages scrutiny of ambient variables that impact educational practice, and because it welcomes open dialogue and embraces diverse perspectives, transformative thinking is far more rigorous and more likely to foster lasting changes. While the AISR (2004) expressed a later recognition that leadership work is in fact "bolstered by cultural and structural conditions in a school or district;" that change initiatives in which teams of teachers "work outside of

school-wide reform efforts to effect instructional change" do not work; and that various teams functioning at different levels may be necessary (p. 2), Servage still finds the model limited since it ignores societal conditions.

Servage (2008) maintains that effective schools operate within a wider context and, as such, do not keep teachers in a mindset where they scrutinize assessment data independently of social context so as to draw narrow conclusions about the quality of teaching. Through expansion of the discussion of observable outcomes to include conversations on the social and political context in which instruction occurs, teams foster transformation of both the individual teacher and the larger educational environment. Data and practices are never scrutinized independently of context, and emphasis goes beyond mastery of technical skills involved in needs assessment, goal setting, and priority planning, and even beyond attempts to change instructional practice. According to Servage, exclusive focus on shaping pedagogical skills to match assessment results is not transformative and does not promote a "re-visioning" of educational possibilities. What sole reliance on instrumental processes does is reduce PLCs and schools from "complex social and political entities" into mere instruments for controlling people and manipulating environments (p. 65). Servage claims that educators involved in authentic literacy transformation "reflect critically upon both their own actions and the social and policy context in which these actions are framed" (p. 66).

Walker (2008) had addressed the nature of interactions in effective PLCs, stating that, rather than being routine and task-oriented, "discussions are powerful as they involve teachers sharing their perspectives on what and why literacy instruction works" (p. 1). Spanneut (2010) indicates, in addition, that a key ingredient in PLCs' operations is reflective rather than restrictive dialogue (p. 101). Apolitical reflection that focuses only on perceived teaching gaps can in no way be adequate, since thinking is limited to what the data seem to show and to implementation of only a narrow set of tasks geared at achieving short-term gains. In effective PLCs, thinking goes beyond routine activities as teams explore deeper issues. Servage (2008), whose sequence of operations form part of our analysis framework, as does that of the AISR, maintains that placing a ceiling on what can be targeted for reform by literacy leaders may foster "egregiously short-sighted" and "strategic blindness" that results in schools being locked into "dysfunctional patterns that actively work against change" (p. 70). Servage's sentiments mirror those of Friere (cited in Friere & Macedo, 1987). Friere indicates that one really "cannot conduct literacy work outside the world of culture" since "every time that education questions itself, in response it finds itself in the

larger body of culture" (pp. 34–35). Where practitioners converge to address the dilemmas of literacy education, talk must explore more than just instructional variables that are easily observed. Contextual variables, as well as social and political realities, must also be explored.

Transformative practice can contribute much to fostering a collegial atmosphere built on openness and candour, even as it ensures that practitioners appropriately consider the wider societal context in problem solving. Still, it is only when the two models (*instrumental or result-oriented* and *transformative thinking*) are considered along with Bhola's (2006) model of *systems thinking* that we come close to achieving a comprehensive model of leadership processes capable of fully accounting for key attributes of effective *literacy-focused schools* (herein used to denote those schools that acknowledge literacy as the foundation of the curriculum and the basis of all student learning).

Bhola (2006) maintains that the literacy infrastructure in a school comprises many subsystems that must work in tandem if the total system is to work well. Weaknesses in one subsystem can undermine the whole structure, and maintaining focus on only one or a few subsystems can result in blind spots that may render initiatives ineffective. The model forces us to look at literacy problem solving in a more expansive way. As Giles and Hargreaves (2006) maintain, when engaged in systems thinking, leaders are "able to see the 'big picture' of their organization and understand how parts and whole [are] interrelated and how actions in one domain create consequences in another" (p. 126). Research studies by Birenbaum et al. (2009) support the need to undertake inquiry at the student, organizational, and programme level, not just as the instructional level (p. 131). It is for this reason that we combine understandings from the three frameworks—AISR's (2003) instrumental processes; Bhola's (2006) systems thinking processes; and Servage's (2008) transformative thinking processes—in framing the multifaceted conception of core PLC processes that we use to analyse forum problem-solving data in this study. To do this, descriptors of procedural steps from each model were extracted and used to create the framework presented in Table 2. Codes to drive deductive analysis of forum data are included in the framework, and steps for generating these are discussed in the methodology section.

As can be seen from Table 2, the models seem complementary rather than at odds, and we combine all in our exploration of interaction in the forums and look at the data from multiple angles. Hamersley and Atkinson (1995) refer to the process of examining data through multiple lenses as "theoretical triangulation," in which a researcher subjects the data to analysis using "multiple perspectives" (p. 181).

Table 2. Framework for Examining Leadership Processes

The AISR's (2004) Model of Instrumental Processes (PLCs as Management and Accountability Tools)		
Element and Codes	**Thinking Process Driving Action**	**Attributes as Outcomes**
Need/Goal Assessment (GA)	What achievement-based issues and dilemmas does the school face?	Focus on Learning
Priority Setting (SAP)	What key priorities can we identify given all the learning problems students face?	Focus on Learning
Teacher Self Study and Strategy Discussion (RS)	What can we learn from the literature to ensure that we fill key gaps in teaching and learning?	Continuous Professional Learning (from reading the research)
Collective Professional Learning (CPL)	What should be the focus of teacher learning if achievement issues in key focus areas are to be addressed?	Continuous Professional Learning (in teacher teams)
Classroom Observation and Further Need Identification (CCA)	What do outcome data reveal about the impact of teacher learning on student literacy outcomes?	Focus on Learning
Bhola's (2006) Model of Systems Thinking (PLCs as Instruments of Scrutiny and Evaluation)		
Element and Codes	**Thinking Process Driving Action**	**Attributes as Outcomes**
Ideological (IS)	What philosophies, beliefs, values, and attitudes pervade the context? How might these have influenced teaching-learning efforts?	Shared Commitments: Social/Leadership Philosophy; Focus on Learning
Policy and Planning (PPS)	Have stakeholders collectively generated commitment statements (visions, missions, and literacy policies) that convey the organization's mental image of effective practice? Do these need to be put in place?	Shared Commitments: Mental Model of Effective Instruction
Mobilization (MS)	How successful has leadership been in garnering stakeholder involvement? What can be done to improve this?	Shared Commitments: Key Stakeholders

Institutional and Organizational (IOS)	What administrative structures are in place to support reform initiatives? Do these need to be augmented?	Supportive School Conditions
Professional Support (PSS)	What training and support apparatus are available for honing teacher expertise within classrooms? Are they adequate?	Continuous Professional Learning; Supportive School Conditions
Programme and Curriculum Development (CDS)	Do instructional frameworks and curriculum match with the school's mental image of effective practice? How can we improve this match?	Focus on Learning; Shared Commitments
Material and Media (MMS)	Do teaching-learning resources match our mental model of effective instruction? How can we improve this match?	Focus on Learning; Supportive School Conditions; Shared Commitments
Evaluation System (ES)	Do evaluation procedures fit with our mental model of effective instruction? How can we improve this match (in tools used, their focus, and how results are used)?	Focus on Learning/Collective Inquiry into Practice
Teaching-Learning (TLS)	Does what happen in the classroom match with our vision and mental model of instruction? How can the connection be strengthened?	Focus on Learning; Continuous Professional Learning
Servage's (2008) Model of Transformative Thinking (PLCs as Contexts for Critical Thinking)		
Element and Codes	**Thinking Process Driving Action**	**Attributes as Outcomes**
Articulate Need for Transformation (FT/SPC)	What variables in the environment external to the school impact our practice?	Supportive Conditions; Shared Commitments; Collective Inquiry
Variant Perspective on Ambient Variables (VCP)	Is there democratic participation of supporters as well as naysayers? Are all stakeholders' views and positions represented?	Supportive School Conditions; Shared Commitments
Respectful, Active Listening	Do members listen respectfully to all, including those with different views on causes, actions, and outcomes?	Supportive School Conditions; Shared Commitments
Critical Reflection – Expose Gaps in Thinking (BST	Do members evaluate and expose blind spots in each other's and their own thinking in respectful ways?	Supportive School Conditions; Collective Inquiry into Practice
Reasoned, Collective Solutions/Insights (RCS)	Whose ideas form the basis of final conclusions? Are biases in whose perspectives are used evident? What well-founded conclusions can be reached regarding viable actions?	Supportive School Conditions; Shared Commitments

Methodology

In answering key questions regarding whether the 15-week graduate-level literacy leadership course addressed key attributes and processes, a group of 60 leadership candidates were surveyed and their text-based interactions in online forums analysed. The researchers, while viewing the study as rooted primarily in grounded theorizing, resisted the urge to pigeonhole the research into a specific typology (especially given its multifaceted nature), viewing it instead as a living entity that evolved as the study proceeded. Maxwell (2008), in discussing qualitative research design, warns that "typologies are usually based on a limited number of features of the study, and by themselves do little to clarify the actual functioning and interrelationships of the component parts of a design" (p. 214). Further, Maxwell perceives "analysis as a part of design" and as something that also needs to be designed (p. 214). Thus, a mixed method design drove data analysis, and involved use of: (1) survey data, including both descriptive and inferential statistics, to gather insights into course design and delivery, and to understand levels of connectedness among key attributes; and (2) classical content analysis, with combined inductive and deductive analysis (using semi-structured componential or conditional matrix), to generate a model of PLC interaction.

Sample Selection and Data Reduction

A nested sampling design was utilized, which involved targeting all students in soliciting survey data, followed by selective sampling (bolstered by UWIOC's random assignment of students to forum groups) in determining the unit of analysis (the learning forum); the depth of analysis (only graded forums); the breadth of analysis (Forums 1, 2, and 3 only); and in selecting forum informants (one group per forum). Finally, highly selective sampling (sampling within cases) was used during microanalysis of the data, so that the researchers could zero in on specific cases for further deeper scrutiny when patterns of frequency in the data prompted this. Hammerlsey and Atkinson (1995) support the use of selective (as well as highly selective) sampling, but state that there should be "adequate representation of the people involved in a particular case" (p. 49). Thus, initial random assignment of students to forum groups was essential. This is because, even though generalizability to the wider population (statistical generalizability) was not a goal, the researchers had to ensure that, if a tentative model of interaction was derived, understandings from that model could be extended to cases in the other forum groups that were not included in the analysis for a specific forum (analytical generalizability or transferability). For

information on this distinction see Maxwell (2008). For further support for discriminant or highly selective sampling in coding and theorizing in qualitative studies, see Straus and Corbin (1998, p. 211). The random sampling in the nested design was essential for reducing the data while offsetting key informant bias (Leech & Onwuegbuzie, 2008).

To select forum informants, the researchers placed group/instructor labels in one box and the forum labels (1 – leadership; 2 – data; 3 – professional learning) in another. Forum type and group selected together were matched and a number assigned based on the forum label. Thus, all groups are represented. It seemed fitting to use graded forums as the *unit of analysis* since (a) participation in these forums was extremely high, (b) the coordinator (one of the researchers) did not participate in or grade these forums, and (c) the forums coincided with units in which candidates across groups problem-solved similar real-life issues. UWIOC directives are specific regarding course coordinators refraining from engagement in group forum discussions, thus researcher bias was not deemed a real issue (Onwuegbuzie & Leech, 2007). Forums attached to Modules 1, 2, and 3 were deemed adequate selections for the purpose of the study, since the action dimension of Module 4 had already been covered in the first three forums as a natural part of addressing school conditions each time problem solving surrounding leadership, learning, and instruction took place. This is a prerequisite established in the research and in the process models used to drive inquiry.

The researchers aimed to address threats to validity through initial theoretical triangulation; the garnering of use of "rich data;" comparison of qualitative outcomes with quantitative outcomes; comparison of statistical modelling (Factor Analysis with Varimax rotation) and qualitative modelling (macro- and micro-analysis); use of feedback from the survey as a form of indirect member check (*respondent validation*); and comparison of data from this group with data from a subsequent group as part of follow-up reliability scrutiny.

Instrumentation

A brief questionnaire (based on attributes of literacy-focused schools) and a semi-structured matrix (based on key processes) were used to analyse the data. The questionnaire, devised to facilitate the surveying of course participants, had three sets of items. Items 1 and 2 collected demographic data, while Items 3 to 7 collected data on the extent of course attention to the five core PLC attributes. A final open-ended question sought additional comments. Participants used the questionnaire

to rate the course according to whether its content and assignments met the Gold, Silver, Bronze, or Copper Standard for each attribute:

- To meet the Bronze Standard, the course had to at least have conveyed concepts linked to the specific PLC attribute (e.g., shared leadership).
- To meet the Silver Standard, the course had to have also provided guidelines for implementing PLCs' operations to institute that attribute (e.g., establishing a literacy leadership team).
- To achieve the Gold Standard, the course had to have, through its assignments, required students to apply concepts, procedures, and guidelines to action (e.g., propose a research-based team for a specific school or critique an established one; propose a training plan for the literacy leadership team; develop protocols to guide a team's action).
- For the Copper Standard, the course would have neglected to teach key principles, to outline related procedures, and to engage students in concrete tasks related to instituting the specific attribute.

There is a solid rationale for focusing on candidates' ability to display knowledge of research-based practices, engage in such practices themselves, and guide others in implementing them. The International Reading Association's *Standards for Reading Professionals* (2010) establishes a need to focus not only on what literacy instructional leaders know, but also on whether they "can do, can support, and can lead." Thus, candidates must show that they understand effective practice, can implement them in the schools in which they are based, and can distinguish effective from ineffective practice in the work of others. These requirements match the rating scheme used in the survey, and item categories are mirror images of research-based attributes of PLCs into which key processes are then embedded.

The matrix (devised using levels of processes in Table 3) was considered semi-structured since levels and categories were not deemed a finite list, but could be augmented during data analysis. The matrix initially contained three major levels (macro conditions) matched with the three models of PLC processes initially used. Each level contained subsidiary elements (micro conditions) matching the sub-processes (steps in undertaking the process) or elements of scrutiny as described by the proponent of each model. Strauss and Corbin (1998) maintain that in grounded theorizing, that is, in "building a systematic, logical and integrated account" of a phenomenon, the researcher's quest to "understand as much as possible" about that phenomenon—"its

properties and dimensions, its structure, or its processes"—must involve "locating [the] phenomenon contextually within the range of macro and micro conditions in which it is embedded and tracing out the relationships of subsequent actions/interactions through to their consequences" (pp. 181–183). The writers promote the matrix as a practical means for "tracking" components and for tracing "paths of connectivity" (p. 182). Thus, the matrix seemed a logical tool to monitor engagement in key processes.

Data Collection

An email invitation, with a unique link for each candidate, was sent via *surveymonkey.com* (an online survey development, distribution, and collation tool). The researcher recognized that course outcomes and the grade students received for the course could potentially influence their ratings, as could their level of engagement in the course. Still, participation levels were high, as noted in forum participation grades assigned by group facilitators (an average score of 21 out of 30 points) and in demographic data collected. Students were also reminded of the value of their ratings for improving the quality of literacy leadership training in the Caribbean, and were, as part of the survey instructions, directed to use only knowledge of course content to inform their ratings. Students' anonymity was ensured by their being sent the web link to the survey, and by their being alerted within the email itself (a requirement of the tool without which the message cannot be sent) that they had only to click a specific link provided to opt out of the study. In cases where students clicked the link to opt out (and some did), the system automatically removed them from the participant list.

In processing the data for the content analysis, the researchers downloaded text-based conversations from the forums, after which dates and other identifiers (including hyperlinks) were manually removed to ensure anonymity and confidentiality. Other than this, no further structuring of data was required. Both macro and micro analyses were then conducted on the data.

Data Analysis

Data analysis was done in two main stages. While percentages (derived by the web tool used) based on student ratings were downloaded, and results for Items 3 to 7 used as the basis for determining the level to which candidates perceived the course to have addressed key attributes, classical content analysis with elements of componential and taxonomic analysis was used to process the conversational data. Leech and

Onwuegbuzie (2008) cite classical content analysis (CCA) as an "objective, systematic and quantitative description of manifest content of communication" indicating that this method is appropriate for processing "talk data" (p. 596). The writers state additionally that CCA can be combined with other analytical and statistical techniques, and that both inductive and deductive coding can be used, although the latter is more common (see also Elo & Kyngas, 2007).

Combined deductive and inductive coding allowed for generation of frequency data for each of the categories and subcategories in the semi-structured matrix. Deductive or closed coding, on the one hand, allowed for use of predetermined categories (components) in the matrix to process the data and to determine the extent of match between research-based processes and those reflected in the conversations. Inductive or open coding, on the other hand, allowed for extraction of emerging insights from the data. Pursuing both data methods simultaneously raised the possibility that a tentative model which confirms, extends, or refutes those presented in the research could emerge.

Precedence exists in the work of Elo and Kyngas (2007) for using classical content analysis—involving a combination of deductive and inductive coding—in "analysing written, verbal or visual communication messages" (p. 107). The researchers provide specific procedures for conducting such an analysis, stating that its use is ideal when the ultimate goal is theory or model generation (p. 110). The procedure they outline and deem useful for researchers aiming "to identify critical processes" (p. 108) comprises three phases: preparation, organizing, and reporting.

In the **preparation phase**, the researchers selected the unit of analysis (the graded learning forum) and decided what to analyse, in what depth, with what breadth, and with whom.

In the **analytical phase**, inductive and deductive coding processes were initiated simultaneously. Codes had been derived for the matrix categories so that manifest content of forums could be analysed, even though latent content (implied meanings) was duly noted. Using the semi-structured matrix, the researchers independently read and coded the data to determine the extent of connect between processes from the literature and those engaged in or referenced by students. The structured nature of the matrix allowed for linkages to be made between authentic forum data and the coding components, and for codes to be grouped into thematic categories. The matrix's open-endedness allowed the researchers to remain receptive to the possibility that new categories could emerge as analysis progressed.

Using the *Review* function in *Microsoft Word*, the researchers then added annotations to the data using these codes, deriving new codes for

emerging concepts. The researchers looked for instances during problem solving in which participants referenced specific evidence-based PLC attributes or processes as essential, engaged in such processes, or cited a process as having been neglected in a case. Codes had to be generated for new categories and the matrix continually modified as analysis progressed. Modifications were appropriately tracked. As such, one new level of processes accounting for instructional coaching was added, and a subsidiary element (cross-context comparisons) was added to transformative thinking.

Once the data were coded, the researchers compared notes and used cross-comparisons to question, eliminate, re-label, or confirm notations until consensus was reached. Since a very streamlined framework was used, there was much consensus in terms of categories. The next step involved deriving count data from categories and subcategories, and generating conclusions regarding the extent of match between research-based categories and the data. A tentative model was generated from the findings, follow-up reliability and factor analyses conducted to affirm findings, and a final search of the literature conducted to see whether models exist that adequately account for processes and connections observed.

Once this process was completed, the researchers proceeded to present findings and to propose a tentative model of leadership that emerged out of interaction among Caribbean literacy professionals under expert guidance—one that matched the data and could be the focus of later confirmatory research.

To garner peer feedback and critique, and to ensure methodological rigour, the researchers undertook the **reporting phase** by presenting the paper at various conferences. In this way, the researchers got feedback from practitioners, teacher educators, and policymakers in refining the paper for publication.

Findings and Discussion

Reliability Analysis, as well as Factor Analysis with Varimax Rotation using SPSS Version 20, was conducted to determine the internal consistency and dimensionality of student response on the survey tool. Reliability analysis using Cronbach's Alpha for the 5-item scale revealed a reliability level of $\alpha = .74$. This level is considered respectable (DeVellis, 1991) or acceptable (George & Mallery, 2012, p. 251). Results further indicated that if Collaborative Inquiry, the only item showing an inter-item, inter-scale correlation below .3 were removed, the scale reliability could be considered good ($\alpha = .8$). Factor analysis was

conducted, therefore, to determine whether the scale was uni-dimensional or, as in most education-oriented scales, multi-dimensional.

Prior to the factor analysis, non-parametric tests were conducted to determine the normality of the data. Both the One-Sample Kolmogorov-Smirnov Test and the One-Sample Chi-Square nonparametric tests were automatically selected by PASW Statistics in undertaking these tests on the five items. Results revealed that the null hypothesis regarding non-normality could be rejected for Items 4 and 5 (p = .000), and the hypothesis regarding non-equal probabilities in occurrence could be rejected for Items 1, 2, and 3 (p = .000).

Factor Analysis with Varimax Rotation (using a .4 extraction criteria) revealed the following factor loadings: Shared Leadership (SL = .50); Shared Commitments (SC = .75); Continuous Professional Learning (CPL = .50); and school conditions (SC = .72). All these formed one component, accounting for 61% of the variance in student ratings. Collaborative/Collective Inquiry (CI = .35) was revealed to form a potentially separate but closely related construct, after rotation. The results for collaborative inquiry seem logical since, while the other attributes focus on creating conditions conducive to teaching and learning improvement, collective inquiry seems evaluative in nature.

To verify that the same results would be obtained using the scale with a subsequent group, the researchers sent out the unadjusted survey to the current (2012) group enrolled in the same course. Forty of 61 students responded to the survey after three promptings. Results for the two were comparable (α = .722; factor loadings: SL = .67; SC = .92; CPL = .46; SC = .71. Collaborative Inquiry (CI = .60) loaded onto a separate component).

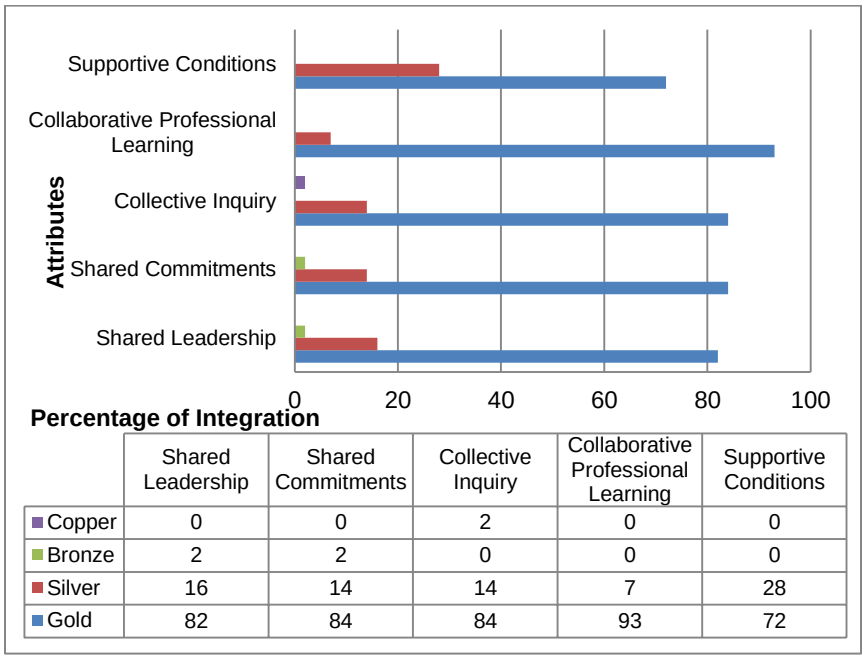
An Independent Samples T-test run using both groups revealed equal variances between the groups (p = .30; .77; .09; .14; .30, respectively) on all five items, and no significant differences in ratings (p = .48; .80; .40; .47; .48, respectively). Findings will have implications for the model derived using qualitative data, and will serve to provide what Hammersley and Atkinson (1995) refer to as *respondent validation* for the qualitative data, that is, for an indirect member check in which the researchers compare "inferences drawn from one set of data forces" using "data from others" (p. 198).

Research Question 1

To what extent did candidates believe the course addressed core leadership attributes and processes?

Results from the survey and analysis of conversations indicate that the course did, in the eyes of candidates, address key PLC attributes and processes to a large extent. A total of 40 candidates (67%) and three instructors completed the rubric. Only student ratings were used. Items 1 and 2, which collected demographic and participation data, showed that, of the 40 candidates that participated in the survey in the first course offering, 84% had read all materials and 86% had participated in all forums. All students (100%) participated in the graded forums. Additionally, 86% had viewed all video resources. On Attribute A (Shared Leadership), measured by Item 3, 82% of students rated the level of exploration of the attribute at the Gold Standard, indicating that the course taught principles and procedures as well as engaged them in school-based problem solving involving the attribute. For Attribute B (Shared Commitments), 84% of students rated the course at the Gold Standard. On Attributes C (Collaborative/Collective Inquiry); D (Collaborative Professional Learning); and E (Supportive Conditions), rating at the Gold Standard was at 84%, 93%, and 72%, respectively. Only two respondents completed the open response question soliciting additional comments and both lauded the course as exemplary, though rigorous. Figure 1 shows ratings at the Silver, Bronze, and Copper levels for each attribute.

Overall, between 72% and 93% of participants felt that the course had conveyed key attributes at the Gold Standard. The majority of students believed that the course prepared them to understand and apply knowledge of PLC attributes, even though greater adherence to principles of collective action and greater attention to school material conditions (Attribute E) were needed. In terms of calls for better conditions, it appears that students felt that more than school conditions should be addressed during inquiry and strategic planning.



	Shared Leadership	Shared Commitments	Collective Inquiry	Collaborative Professional Learning	Supportive Conditions
Copper	0	0	2	0	0
Bronze	2	2	0	0	0
Silver	16	14	14	7	28
Gold	82	84	84	93	72

Figure 1. Extent of integration of core leadership attributes into the leadership course.

Research Question 2

To what extent is awareness of attributes and processes evident in problem-based conversations in key learning forums?

Analysis of the conversations indicates that candidates did display knowledge of, and in fact continually invoked or engaged in, key leadership processes, including the newly emerging process (*Teacher-Oriented Coaching Processes*). Candidates referenced a broad spectrum of PLC processes as they problem-solved and interacted in the selected forums. The findings from all three forums are presented in Figure 2. Note that Forums 1 and 2 have similar data patterns, which prompted further scrutiny.

Forum 1 examined interaction among the 19 candidates in Group 1. The group was presented with a case in which a school district attempted to establish a literacy leadership team, termed the *literacy faculty*. Participation of specific members of the school community was mandated and the staff resisted. While the initiative varied in effectiveness across contexts, the initiative itself teetered on the brink of failure. The case is quite reminiscent of a similar effort in the CCETT project, with which candidates were quite familiar. They could therefore draw on knowledge of the project's realization in their context. They

could also reference research-based principles and procedures for establishing teams as presented in Modules 1 and 2, as well as on available video vignettes. Since students had only been exposed to the modules on framing the instructional context and shared leadership, it was expected that focus would be on these. What was not clear was whether elements from other models of leadership processes would be evident.

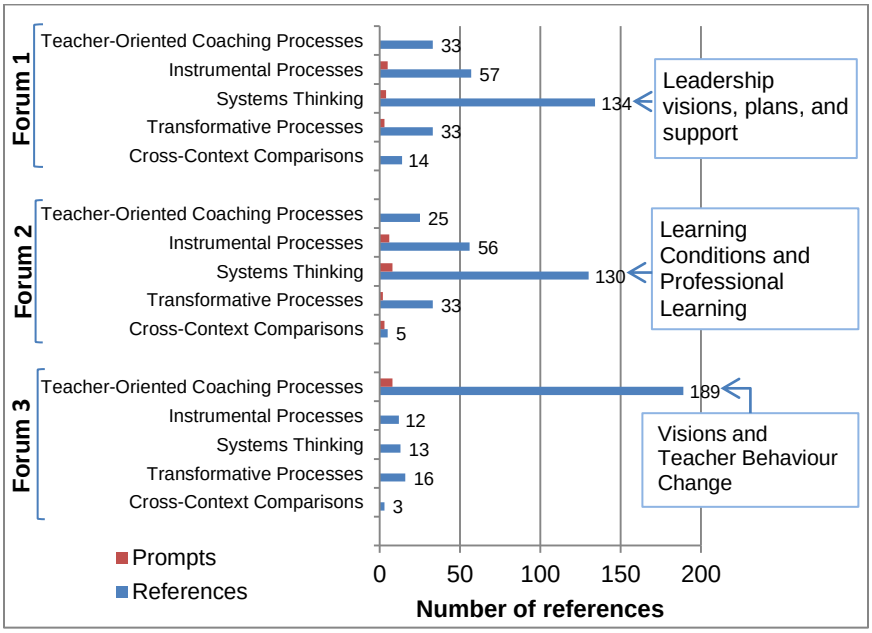


Figure 2. Number of reference to key processes in problem-based conversations.

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modules on framing the instructional context and shared leadership, it was expected that focus would be on these. What was not clear was whether elements from other models of leadership processes would be evident.

Based on frequency counts from Forum 1, candidates made 130 references to *systems thinking*, 56 references to *instrumental processes*, and 33 references to *transformative thinking*, indicating that references were spread across the three areas but rested more with failure to adequately engage in system thinking. An additional element (cross-context matching) appeared to emerge, as candidates, who were spread across six different countries and nine different sites, sought to identify whether issues were spread across the different locales and were fundamentally the same. This element was later treated as a sub-process of transformative thinking since it involved examining the wider context beyond the school.

Since the majority of references involved *systems thinking*, the researcher wanted to find out what specific elements of the school infrastructure (the subsystems as described by Bhola, 2006) candidates identified as problematic. By far, problems with the institutional and organizational system (core leadership), ideology, stakeholder mobilization, and professional support were the most cited problems. A breakdown of references is provided in Table 3. Categories are ranked based on extent of reference, and sample quotes are provided to demonstrate the focus of thinking.

As can be noted from Table 3, comments seemed weighted toward lack of a common mental model of effective instruction, failure to mobilize parties to the vision, and limited supports as orchestrated by school leadership. References plummeted for classroom-related categories, suggesting that candidates perceived these as less crucial for this issue. All in all, processes outlined in all PLC models were represented in conversations quite early in the course, though focus was consistent with that of a team in the initiation phase of the PLC life cycle. While facilitators prompted for all processes, the majority of comments centred on the ideology, visions, and supports.

Forum 2 took the form of an online data retreat. In subgroups, the 23 candidates in Group 2 (spanning 8 countries and 11 sites) examined literacy performance data for a 3rd grade class. Candidates worked on student performance data to identify learning need areas or priorities that would drive strategic action plans they would later create. Protocols made it clear that teams had to derive priorities linked to the needs of all learners, had to isolate related professional development needs, and should pinpoint needed training provision, resources, and supports.

Results from the analysis revealed that systems thinking retained its primacy (134 references), although emphasis had shifted from leadership ideology, vision, and supports toward categories more aligned with teaching and learning. As soon as need areas were determined, teachers tended to shift attention toward scrutiny of testing tools and procedures, curriculum and teaching-learning framework, the nature of the population served, and the quality of resources available. This was evident in the order of numberings used in entering count data into the matrix, in which 1 was the first element referenced and higher numbers being subsequent references. Table 4 depicts the shift in emphasis of systems thinking in Forum 2 toward instructional rather than school leadership variables.

It seems apparent that, in Forum 2, priorities in systems thinking shifted so that there is intense focus on supportive conditions (resources) and continuous professional learning, with some attention to the impact of school vision and social variables on teaching-learning outcomes. Focus seems consistent with that of a team in the implementation phase in the PLC life cycle.

Forum 3 addressed teacher professional affect and response to instructional change. Candidates were given the case of an ineffective though confident novice teacher who resisted the specialists' effort to provide guidance in effective comprehension instruction. Candidates were required to suggest ways of applying understanding of change leadership in guiding the teacher toward closing gaps between current instructional delivery and evidence-based practices.

Once coding began for the forum, which featured the 18 candidates in Group 3 (spanning 7 countries and 11 sites), the researchers recognized that further categories, or perhaps a new level of PLC processes, were needed to adequately account for the data. It appeared that processes involved in working with teachers and in moving them toward autonomous instructional change were too complex to be simply lumped under the continuous professional learning subcategory under instrumental processes. No model used up to that point adequately accounted for comprehensive coaching, cited by the International Reading Association (2010) as being the crux of the literacy leader's role.

Since much of what students mentioned in the forum centred on teacher thinking and behaviour during coaching attempts, the researcher delved more deeply into the notion of cognitive coaching (Costa & Garmston, 2002). The model cites two key assumptions that should drive coaching action, five states of mind that affect a teacher's response to impending instructional change, three communication tools that are vital

if coaches are to work well with teachers, and three coaching goals that should guide action. Coaches must assume that "invisible thought processes drive the overt skills of teaching" and that as "enlightened, skilled colleagues" they can [mediate] a teacher's cognitive processes as well as their behaviour (Costa & Garmston, 2002). The first assumption raises coaches' awareness of the crucial need, before implementing change, to understand what teachers think about their practice. Coaches must understand teacher thinking in five areas: efficacy, flexibility, perception of craftsmanship (quality of work), consciousness of evidence-based practice, and propensity for interdependence with colleagues (the five states of mind). Coaches must be able to communicate well with teachers so that they can ultimately achieve the three main behaviour change goals (promote trust and reduce resistance, guide collective professional learning, and facilitate autonomous change in practice).

Owen (2005) supports Costa and Garmston (2002), indicating that attempts to improve teacher collective practice (and ultimately student learning) must focus on changing the way teachers think, as well as the way they teach (two key foci of action). Research by Green and Etheridge (2001) and by Hanley, Maringe, and Ratcliffe (2008) support this; the latter researchers indicating that "changing teachers' beliefs and changing their classroom practice is more of a cycle, where each reinforces and provides impetus for the other" (p. 712). Hanley et al. do not therefore assign primacy to one or the other. The researchers decided to add a new level of processes, coded "Teacher-Focused Coaching Processes" (TCP), and to place under this two subcategories: Understanding States of Mind (USM) to capture thinking and communication tools, and the Continuous Professional Learning (CPL) label from instrumental processes so as to capture efforts to change practice and affect. This new category would combine well with instrumental action, and with transformative as well as systems thinking, and allow researchers to retain a unified, multidimensional framework.

When the case involved problem-solving teacher response to change efforts, attention centred on teacher-focused coaching processes (189 references), which essentially overshadowed the other processes. As such, only limited attention was given to instrumental processes (12 references) and to systems thinking (13 references). Emphasis in this case was on the impact of failure to change on the teaching-learning system ("*The students' ability to attend to comprehension skills will be adversely affected if changes are not made"*). Some consideration was given to wider societal forces in dealing with teacher resistance. Since this was a male teacher, candidates were concerned that using the wrong

approach might negatively affect the retention of male role models *("…it is very important that the teacher is not offended. Young vibrant male teachers are desperately needed …")*.

When the teacher-oriented coaching comments were disaggregated, as done with dominant processes in the other forums, scores were almost equally distributed between understanding what teachers think about their practice and influencing how they teach (USM, 97; CPL, 92). Under CPL, much emphasis was on building teacher knowledge through exposure to the research on evidence-based practices, first in workshop settings then through collaborative, classroom-embedded coaching. Candidates did indicate that differentiated coaching was often necessary (and could complement collaborative coaching). Importantly, candidates recognized that understanding and changing teachers' thinking was essential in getting them to exercise volition in changing practice. Two of the five states of mind (efficacy and perception of craftsmanship) were cited as more potent, or perhaps more primary, than the other three.

The level of discussion in the forum reflected the working of a team in the institutionalization phase of PLC, as focus was on the fit between the school's teaching visions and instructional practice. Samples from the problem-solving conversation are presented in Table 5, and matched to themes and key attributes.

Some reverse coding had to be done to account for this new coaching category in Forums 1 and 2. Maxwell (2008) indicates that qualitative research should be reflexive with "later steps connecting back to earlier ones" (p. 214). Hammersley and Atkinson (1995) maintain also that "analysis of data is not a distinct stage," and support what they refer to as *iteration* (moving back and forth between data generation and analysis) and *reflexivity* in processing qualitative data under specific conditions: when data "to check a particular interpretation are missing or the typicality of crucial items of data cannot be checked, or some of the comparative cases necessary for developing and testing the emerging theory have not been investigated" (p. 174).

Table 3. Distribution of Comments in the Dominant Category in Forum 1

Categories, Codes, and Frequency	Sample Quotes	Themes	Related Attributes
Institutional and Organizations System (IOS) – 24	"*…there seemed to be lacking in the necessary skills to function effectively as a team"* *"… the principal, who should be a key member of the group, was left out in the planning"* *"…principals should consider building a literacy team with individuals who represent different perspectives, grade levels and job responsibilities"* *"There were no follow up meeting(s)..."*	Team composition and cohesion; how administration organized its work; material support	Shared Leadership and Supportive Conditions
Mobilization System (MS) – 23	"*...the vision needs to be understood, articulated and owned by the whole school"* *"teachers were not willing …and felt forced to participate"* *"In schools where the program was successful there was also a high level of community and parental involvement"*	Ownership of the vision; stakeholder mobilization	Shared Commitments
Professional Support System (PSS) - 23	*"Most teachers and principals were thrust into it without prior knowledge or training in executing a literacy development plan"* *"Was it enough to ask them to do research on a particular area of literacy instruction that they would then have responsibility for it in the PD sessions?"* *"The members of this team should possess literacy expertise as well as leadership skills"*	Training in leadership and and literacy for faculty and administration	Supportive Conditions

Categories, Codes, and Frequency	**Sample Quotes**	**Themes**	**Related Attributes**
Ideological System (IS) - 22	"*Faculty should not be forced to become the member of the team…principals should not build their teams at gun point"* *"…schools had different problems and as such different literacy goals"* *"A single document was inadequate …"*	Ideology informing leadership team formation; match between initiative and context	Shared Commitments; School Conditions (Extra-Contextual Considerations)
Policy and Planning System (PPS) - 20	*"…the absence of a school literacy policy [meant] there was no central area of focus"*	Policies and plans driving the initiative	Shared Commitments (Visions, Missions and Policies)
Teaching Learning System (TLS) - 8	*"Literacy policies serve as the foundation for literacy efforts to use proven practices and to maintain congruence among and across curriculum, instruction and assessment…"* *"the absence of a school literacy policy meant there was no central area of focus by teachers, therefore teachers taught aspects of the curriculum they were comfortable with"*	Classroom variables; programme coherence	Shared Commitments
Evaluation System (ES) - 3			
Programme and Curriculum Development System (CDS) - 2			
Materials and Media System (MMS) - 0			

Table 4. Distribution of Comments in the Dominant Category in Forum 2

Categories, Codes, and Frequency	Sample Quotes	Themes	Related Attribute/s
Teaching–Learning System (TLS) - 26	*"…content teachers must see literacy as 'their thing' as well rather than the literacy specialist job"* *"They would need a collaborative staff effort - sharing of best practices"* *"students would need an enriched learning environment where a variety of experiences, strategy and media would assist in improving reading, writing and thinking skills"*	Cross-curricular linkages; material support; curriculuum	Focus on Learning; Continuous Professional Learning; Supportive Conditions
Materials and Media System (MMS) - 23	*"…accessibility and availability of print materials such as 'story' books and other types of text would be limited"* *"The school will need to source texts to provide for both parents and students to read"*	Material support	Supportive Conditions
Programme and Curriculum Development System (CDS) – 21	*"Teachers need more activities and materials that will assist students in developing the skills of critical analysis and evaluation, and other higher order skills"* *"…help students use higher order thinking skills as well as various reading strategies during the reading process"*	Material support; curriculuum	Focus on Learning; Continuous; Professional Learning; Supportive Conditions
Professional Support System (PSS) - 18	*"Staff needs to learn how to form a learning community"* *"Professional development should be provided for staff to support and guide them in delivery of instruction and learning within a balanced literacy framework… to collect*	Collegial coaching; human capailities support; curriculum and assessment; material support	Continouus Professional Learning; Focus on Learning; Supportive Conditions

Categories, Codes, and Frequency	**Sample Quotes**	**Themes**	**Related Attribute/s**
	data and analyze it to feed their instruction and assessment…" *"…Extensive training in literacy for staff"* *"Teachers would need space in terms of classrooms, small group configurations, schedules for interviews and conferences"*		
Evaluation System (ES) - 18	*"Why the imbalance in the number of questions in each section? Faculty need to question the constitution of the SR [selected response] items [on the test]? Did their juxtaposition affect the responses on the MCs [multiple choice items] that follow them?"*	Curriculum and assessment	Focus on Learning
Policy and Planning System (PPS) - 11	*"They will develop a literacy policy for the school targetting students' weak areas"*	Policies and plans; remediation	Shared Commitments; Focus on Learning
Institutional and Organizations System (IOS) – 10	*"…whether nutrition is an issue that has to be addressed so that the students can focus on their work"*	Material support; curriculum	Supportive Conditions; Focus on Learning
Mobilization System (MS) - 5	*"Parents and the community need to be brought up to speed on the new vision of the school that would need their support…"*	Stakeholder moilization	Shared Commitments
Ideological System (IS) -2	*"…education must involve the total health and well-being of the child"* *"Your mention of 'our adopted children' is so touching, so real, especially when you meet very poor children who are motivated to learn. The true 'heart' of teaching"*	Practitioner affect; material support; teaching and learning	Supportive Conditions; Shared Commitments; Focus on Learning

Hence, the researchers returned to the first two forums to search for references to coaching processes in those conversations. The results of this process are presented in Figure 3. Together, activities in the three forums covered the different phases of implementation of PLCs, suggesting that initial selection of only three forums was justified.

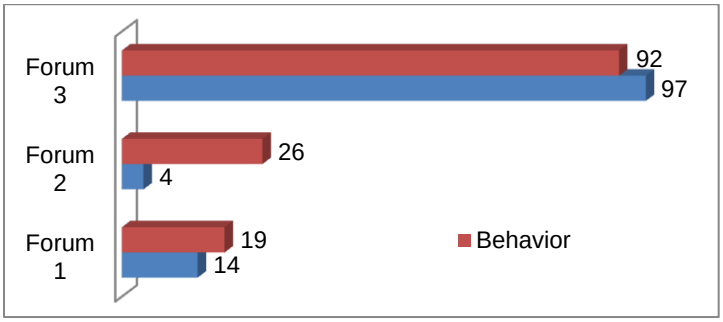

Figure 3. Focus on changing teacher thinking and expertise in the three forums.

Table 5. Distribution of Comments in the Dominant Category in Forum 3

Categories, Codes, and Frequencies	Sample Quotes	Themes	Related Attribute/s
Understanding States of Mind (USM)	*"..adversity inspires creativity and encourages alternative perspectives"* *"Teachers are generally skeptical about others occupying their classroom space"* *"…intrusion on their privacy which can be rather intimidating … reason for the trepidation which is hidden behind the new teachers apparent over confidence"* *"…this depends on the maturity of the teacher and his ability to take constructive criticisms"* *"…it is very important that the teacher is not offended. Young vibrant male teachers are desperately needed in the education system…"* *"… he is confident in his ability and truly feels that he is doing what is needed"* *"Many teachers teach the way they were taught. It may not be the contemporary way or the way that is needed in that situation.*	Specialist's affect and mindset Tradition and isolated practice Teacher affect and reaction Teacher maturity Awareness of practice Effective communication Professional learning climate Taking risks/coaching in groups; group as buffer	Supportive Conditions (Collective) Inquiry – teacher affect/ perceptions Continuous Professional Learning

Categories, Codes, and Frequencies	Sample Quotes	Themes	Related Attribute/s
	However, that is what they know; he doesn't know that he doesn't know" *"reading specialists should be tactful"* *"I would commend him for what he has been doing well, point out obvious strength …and seek engage him in conversations …"* *"using the 'sandwich method'"* *"making him comfortable with having me around; I will then listen to his feedback…"* *"assist members of staff without singling out any one person; encourage him to assess his methods against current research"*		
Collective Professional Learning (CPL)	*"New teachers, like all learners, need different kinds of support at different times in their professional development. As professionals, reading specialists must recognize the novice's changing competence and adjust coaching strategies along a continuum of support"* *"…the teacher thinks that he is doing a good job. There will be a lot of distrust and discontent if the reading specialist should approach him on a one to one basis"* *"the teacher thinks that he is doing a good job. There will be a lot of distrust and discontent if the reading specialist should approach him on a one to one basis"* *"he may feel more comfortable to share ideas and get feedback from his peers"* *"providing content information through literacy content presentations"* *"Study groups will be established…"* *"encourage him to subscribe to a reputable educational journal"* *"provide the teacher with the opportunity to observe a particular teaching method"* *"co-planning in which the teacher will be paired with a teacher at the same grade level"*	Building and maintaining trust Perception of practice – disequilibrium (efficacy, flexibility, craftsmanship, collaboration and interdependence) Continuum of teacher change Group as tool for promoting trust and risk taking Building knowledge/ awareness Peer coaching Awareness; autonomous change in practice	Supportive Conditions Continuous/ Collaborative Professional Learning

Categories, Codes, and Frequencies	Sample Quotes	Themes	Related Attribute/s
	"plan a lesson together and share responsibility; I may also us[e] peer coaching…" *"glean ideas from his peers"* *"teacher gets the opportunity to observe other people doing demonstration lessons that portray good comprehension strategies* *"he will begin to recognize his weakness and be willing to address it"* *"the teacher would learn and develop his craft and appreciate my non-threatening assistance"* *"New ideas, theories and methods are constantly being created as students and the needs of world continue to evolve. Once, my teacher accepts this and opens his mind to a lifetime of learning, he will well be on his way"*		

Research Question 3

What model of literacy leadership interaction can observation of candidates' problem-based conversations reveal?

Hammersley and Atkinson (1995) see model generation as a logical step evolving from macro- and micro-analysis of qualitative data. The writers believe that the progressive searching and focusing done in analysis of the data tend to naturally evolve "from concerns with describing social events and processes to developing and testing explanations," as features of the phenomenon under study start to collect under larger categories (pp. 175–76). The reflexive/iterative process and focused scrutiny conducted on forum data yielded useful insights, which prompted generation of a tentative model of PLC interaction. Importantly, the semi-structure matrix used to analyse the qualitative data proved vital for producing a clear analytical picture; what Strauss and Corbin (1998) in discussing grounded theorizing refer to as "detecting the interplay between conditions, the responses of actors, and the consequences," an essential step in evolving our tentative model (p. 193).

Bolam et al. (2005) had referred to the PLC as "a complex metaphor, one that is multi-dimensional" and needs to be "unpacked" in terms of its characteristics and processes (p. 154). Some of the breakdown of PLC

models (macro conditions) into subsidiary elements (micro conditions) facilitated researchers in the study in conducting the kind of unpacking of PLC processes that Bolam and colleagues deem essential. On the surface, data patterns for processes in Forums 1 and 2 appeared similar—actually mirror images of each other (see Figure 2). Only an unpacking of constituent elements (sub-conditions under systems thinking) could have exposed the fact that the focus of systems thinking in Forum 1 was on leadership ideology, visions, and supports; while the focus in Forum 2 was on training and supporting teachers to advance student learning. In Forum 3, the unpacking of CPL revealed an emphasis on teacher mental image of his own practice, and how that might conflict with the organization's mental image, suggesting possible reasons for resistance to change and impasses in change effort.

Additionally, only this type of unpacking would have revealed that training was needed at three key levels if a PLC leadership frame is to be sustainable: teacher core leadership training (ideology, visions, and supports); training for instructional and assessment improvement; and training in collegial coaching. Findings from iterations are consistent with initial findings regarding a focus on leadership visions, ideology, and supports in Forum 1 and on student learning in Forum 2 (see Figures 4a and 4b). Much of the consideration of teacher perspectives occurs in Forum 3, as was illustrated earlier. The results of iterative analysis for focus on Forums 1 and 2 are presented in Figures 4a and 4b.

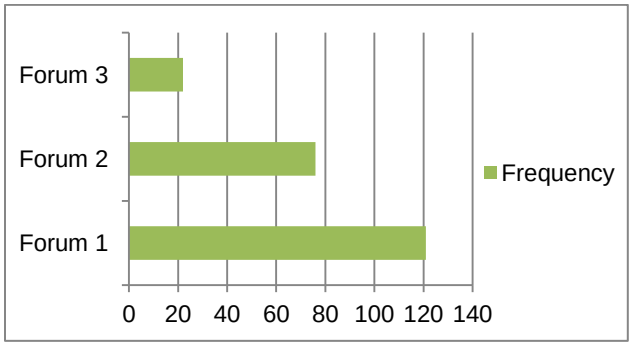

Figure 4a. Focus on 1eadership structures and supports in the three forums.

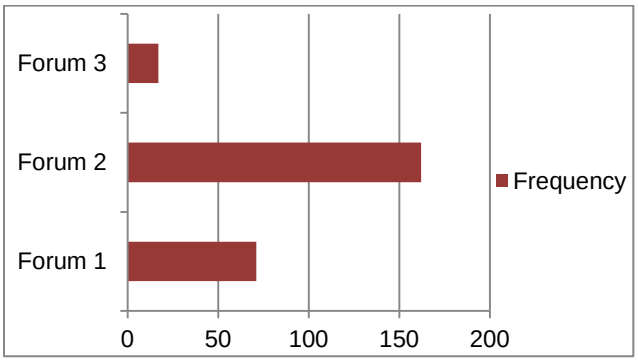

Figure 4b. Focus on learning in the three forums.

No single model of leadership processes explored in the study appeared to adequately account sufficiently for the patterns and connections emerging from forum data, and several models had to be combined in processing the data. An exhaustive review of the research revealed that, although several models exist that cover some elements of the emerging model, no existing model adequately accounted for all elements and connections evident in the data after our systematic unpacking was done. The researchers therefore proceeded to derive a tentative model of leadership processes which, while it contained and reinforced elements of existing models, has its own unique characteristics as arising from interactions among Caribbean literacy professionals. Noteworthy is the fact that although all models of processes used to form the framework for data analysis were represented in each of the forums, some processes took primacy while others were overshadowed. This suggests that no one model could adequately account for all the processes needed in a literacy-focused school preparing for success. Leadership vision, plans, and support is only adequately addressed in Forum 1; teaching-learning and a focus on learning only in Forum 2; and the honing of teacher thinking and practice in Forum 3 only. Clearly, there are connections across the problem-solving contexts as indicated by the fact that all processes were invoked. Still, to cover blind spots in one setting and to ensure due attention to all macro- and micro-conditions influencing school climate and success in promoting student learning, a multilevel model of literacy leadership under the PLC approach must be derived. The model presented in Figure 5 captures this possibility.

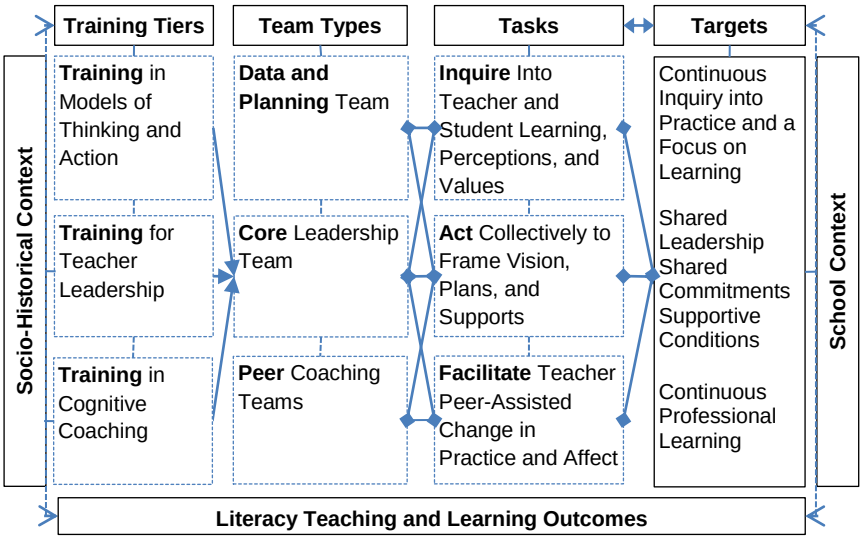

Figure 5. Multi-level (3x3x3) Caribbean Literacy Leadership Model.

Note that evidence from the factor analysis (and from the inter-item correlations for the reliability analysis) done on survey categories (key attributes of PLCs and the processes involved in instituting these, and depicted in Figure 5 as outcomes of multiple processes) does support some level of separation of collaborative/collective inquiry (and, after close scrutiny, continuous professional learning) from the other attributes, even though they all fall within one larger framework of attributes that cohere to create literacy-focused schools that acknowledge their wider settings and work to improve student outcomes.

Conclusion and Recommendations

The following insights and suggestions are directly linked to findings from the analysis and, by inference, to the model presented. The model presents the socio-historical context as *buffers* for a literacy leadership infrastructure, depicted as a 3x3x3 *internal structure* that operates to produce the five attributes of effective literacy-focused schools and, ultimately, to improved student *outcomes*. We link our findings to that 3x3x3 internal structure as we present conclusions from the research as well as recommendations targeted at course designers, teacher educators, school leadership teams, and policymakers.

To achieve the Gold Standard in honing the literacy leadership capacity of Caribbean school-based professionals, a Multi-Level Literacy

Leadership Model that features the following dimensions seems most appropriate:

1. **Training:** Because our findings suggest that training is necessary for successful implementation of a viable leadership structure, we recommend training that:
    a. clarifies the requirements of system, instrumental, and transformative thinking that should inform data and planning teams;
    b. hones leadership visions in a manner that foregrounds democratic participation of practitioners holding different perspectives, and who come from different contexts; and
    c. communicates a need to understand and shape teacher thinking as well as their instructional practice.

    These three training dimensions will then scaffold the interactive processes engaged in by three teams that operate together to influence outcomes.

2. **Teams:** Teams operate on at least three levels in a somewhat funnel (fanned out) structure. There is:
    a. a core leadership team that links what is done in literacy to the overall school mission;
    b. a data and planning team that examines literacy/academic outcomes and sets priorities; and
    c. teacher teams that work on improving classroom practices.

    Presence of administrators (the principal and reading specialist) on all teams prevents the silo effect, where teams work in isolation. Our findings as well as the research indicate that, in ensuring linkages across teams, the principal and reading specialist should be on all three teams, and that there should be a shared vision and mission that binds all teams. Our findings suggest, additionally, that having faculty and administrators from other contexts enriches a team. Also, having different levels of teams operating in tandem may offset sustainability issues and issues related to narrow foci over the life cycle of an initiative. It is clear from our findings that different teams convene for different reasons and tend to focus on different processes, although, together, their actions represent a complete effort at transformation.

3. **Tasks and Targets:** At the outset of a project it is essential to emphasize the end goal—establishment of a supportive context that

features the five core attributes of successful literacy-focused schools and, ultimately, improved student literacy and academic outcomes. Tasks cover levels of thinking and levels of action (presented in other models as phases of PLC implementation). The research and our findings suggest three critical tasks at which teams work as being linked with levels of thinking and team action:

1. Inquiring into outcomes, values, perceptions, and practice
2. Framing and honouring evidence-based statements of commitment regarding improved teaching and learning
3. Assisting teachers (through positive measures) in changing thinking and practice and, ultimately, student outcomes. Our findings indicate that coaching which addresses teacher thinking and action is necessary, and that efforts to change practice must be linked to leadership and student learning by a coherent vision and by the involvement of classroom teachers in literacy leadership

The complex network of interactions between teams and tasks depicted above reflect what Strauss and Corbin (1998) refer to as "multiple and diverse patterns of connectivity and discernible of actions/interactions over time," often evident in pictures emerging from qualitative data. For us, these represent the fact that even though key foci were evident in team interaction, teams engaged in all macro processes at all time, even when specific micro processes were not invoked (p. 188).

The components of PLC emerging from the survey data match well with the findings unearthed from the conversations, suggesting that conversations among Caribbean professionals guided by the research on effective literacy leadership could expose a research-based framework of interaction that matches well with the research, if not with current models.

Final Words

Our exploration of the quality of instruction in the online course *Leadership in Literacy Instruction* opens up our practice as text, and focused more on what candidates can do. The study was necessary to advance thinking on how we train literacy leaders in the Caribbean. Measuring what we do against what works and linking with what schools need is crucial if universities and colleges are to produce competent literacy leaders. We encourage further exploration of the model we present which, while informed by interaction from trained teachers from

at least 10 countries, could benefit from support from further school-embedded inferential research.

References

Alberta InPraxis Group. (2006). *Professional learning communities: An exploration*. Retrieved from http://education.alberta.ca/media/618576/prof_learng_communities_2006.pdf

Andrews, D., & Lewis, M. (2002). The experience of a professional community: Teachers developing a new image of themselves and their workplace. *Educational Research, 44*(3), 237–254.

Annenberg Institute for School Reform. (2004). *Professional learning communities: Professional development strategies that improve instruction*. Retrieved from http://www.annenberginstitute.org/pdf/proflearning.pdf

Antoniou, P., & Kyriakides, L. (2011). The impact of a dynamic approach to professional development on teacher instruction and student learning: Results from an experimental study. *School Effectiveness and School Improvement, 22*(3), 291–311.

Berry, B., Johnson, D., & Montgomery, D. (2005). The power of teacher leadership. *Educational Leadership, 62*(5), 56–60.

Bhola, H. S. (2006). *Approaches to monitoring and evaluation in literacy programmes*. Retrieved from http://unesdoc.unesco.org/images/0014/001459/145947e.pdf

Biancarosa, G., Bryk, A. S., & Dexter, E. R. (2010). Assessing the value-added effects of literacy collaborative professional development on student learning. *Elementary School Journal, 111*(1), 7–34.

Birenbaum, M., Kimron, H., Shilton, H., & Shahaf-Barzilay, R. (2009). Cycles of inquiry: Formative assessment in service of learning in classrooms and in school-based professional communities. *Studies in Educational Evaluation, 35*(4), 130–149.

Bolam, R., McMahon, A., Stoll, L., Thomas, S., Wallace, M., Greenwood, A., … Smith, M. (2005). *Creating and sustaining effective professional learning communities*. Retrieved from http://www.mpn.gov.rs/resursi/dokumenti/dok267-eng-DfES_professional_learning_communities.pdf

Bottoms, G., & Schmidt-Davis, J. (2010). *The three essentials: Improving schools requires district vision, district and state support, and principal leadership*. Atlanta, GA: Southern Regional Education Board.

Castle, S., Arends, R. I., & Rockwood, K. D. (2008). Student learning in a professional development school and a control school. *Professional Educator, 32*(1), 1–15.

Costa, A. L., & Garmston, R. J. (2002). *Cognitive coaching: A foundation for renaissance schools*. Norwood, MA: Christopher-Gordon Publishers.

Darlington-Hammond, L., & Loewenberg-Ball, D. (1998). *Teaching for high standards: What policy makers need to know and be able to do*. Retrieved from http://www.nctaf.org/documents/teaching-high-standards.pdf

DeVellis, R. F. (1991). *Scale development: Theory and applications* (Applied Social Research Methods Series, Vol. 26). Newbury Park, CA: Sage.

DuFour, R., & Jolly, A. (2007, November 19). Building professional learning communities: Chat. Retrieved from http://www.edweek.org/chat/2007/11/19/transcript_11_19_2007.html

Dunne, F., Nave, B., & Lewis, A. (2000). *Critical friends: Teachers helping teachers to improve student learning* (CEDR Research Bulletin No. 28). Bloomington, IN: Phi Delta Kappa Center for Evaluation, Development and Research.

Dye, R., Helwig, J., Lambert, C., & Marshall, E. (2008). *Evaluation of the Expanding Education Horizons Project*. Retrieved from http://pdf.usaid.gov/pdf_docs/PDACN844.pdf

Elo, S., & Kyngas, H. (2007). The qualitative content analysis process. *Journal of Advanced Nursing, 62*(1), 107–115.

Englert, C. S., & Tarrant, K. L. (1995). Creating collaborative cultures for educational change. *Remedial and Special Education, 16*(6), 325–336, 353.

Feger, S., & Arruda, E. (2008). *Professional learning communities: Key themes from the literature*. Retrieved from http://www.lab.brown.edu/pubs/pd/PBS_PLC_Lit_Review.pdf

Fullan, M. (2006, November). Leading professional learning. *School Administrator*. Retrieved from http://www.michaelfullan.ca/Articles_06/Articles_06b.pdf

Friere, P., & Macedo, D. (1987). *Literacy: Reading the word and the world.* Westport, CT: Bergin & Garvey.

George, D., & Mallery, P. (2012). *IBM SPSS statistics 19 step by step: A simple guide and reference* (12th ed.). Boston, MA: Pearson.

Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly, 42*(1), 124–156.

Green, R. L., & Etheridge, C. P. (2001). Collaborating to establish standards and accountability: Lesson learned about systemic change. *Education, 121*(4), 821–829.

Hallinger, P., & Heck, R. H. (2010). Leadership for learning: Does collaborative leadership make a difference in school improvement? *Educational Management Administration & Leadership, 38*(6), 654–678.

Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in practice* (2nd ed.). London, UK: Routledge.

Hanley, P., Maringe, F., & Ratcliffe, M. (2008). Evaluation of professional development: Deploying a process-focused model. *International Journal of Science Education, 30*(5), 711–725.

Helm, C. (2007). Teacher dispositions affecting self-esteem and student performance. *Clearing House, 80*(3), 109–110.

Hillard, K., Davies, R., & Griffith, S. (2009). *Caribbean Center of Excellence for Teacher Training (C-CETT): Annual performance report*. Retrieved from http://www.caribcett.org.jm/Text%20Files/Annual%20Reports/ANNUAL%20REPORT%20CCETT%202008%202009%20PDF.pdf

Hollins, E. R., McIntyre, L. R., DeBose, C., Hollins, K. S., & Towner, A. (2004). Promoting a self-sustaining learning community: Investigating an internal model for teacher development. *International Journal of Qualitative Studies in Education, 17*(2), 247–264.

Honig, M. I., Copland, M. A., Rainey, L., Lorton, J. A., & Newton, M. (2010). *Central Office transformation for district-wide teaching and learning improvement*. Seattle WA: Center for the Study of Teaching and Policy, University of Washington.

Hord, S. (1997). Professional learning communities: What are they and why are they important? *Issues About Change, 6*(1). Retrieved from http://www.sedl.org/change/issues/issues61.html

Huffman, H. B., & Hipp, K. K. (2003). Responding to the challenge. In J. B. Huffman & K. K. Hipp (Eds.), *Reculturing schools as professional learning communities* (pp. 109–120). Lanham, MD: Rowman & Littlefield.

Hurd, J., & Licciardo-Muso, L. (2005). Lesson study: Teacher-led professional development in literacy instruction. *Language Arts, 82*(5), 388–395.

International Reading Association. (2010). *Standards for reading professionals*. Retrieved from http://www.reading.org/General/CurrentResearch/Standards/ProfessionalStandards2010/ProfessionalStandards2010_Introduction.aspx

Kern, D. (2009). Reading teachers as leaders: The promise of literacy coaching. *New England Reading Association Journal, 45*(1), 88–90.

Knapp, M. S., Copland, M. A., Honig, M. I., Plecki, M. L., & Portin, B. S. (2010). *Learning-focused leadership and leadership support: Meaning and practice in urban systems*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/Focused-Leadership-and-Support-in-Urban-Systems.pdf

Kruse, S., Louis, K. S., & Bryk, A. (1994). Building professional community in schools. *Issues in Restructuring Schools, 6*, 3–6. Retrieved from http://www.wcer.wisc.edu/archive/cors/Issues_in_Restructuring_Schools/ISSUES_NO_6_SPRING_1994.pdf

Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education, 19*(2), 149–170.

Leech, N. L., & Onwuegbuzie, A. J. (2008). Qualitative data analysis: A compendium of techniques and a framework for selection for school psychology research and beyond. *School Psychology Quarterly, 23*(4), 587–604.

Leithwood, K., Steinbach, R., & Ryan, S. (1997). Leadership and team learning in secondary schools. *School Leadership and Management, 17*(3), 303–326.

Little, J. W., Gearhart, M., Curry, M., & Kafka, J. (2003). 'Looking at student work' for teacher learning, teacher community and school reform. *Phi Delta Kappan, 85*(3), 184–192. Retrieved from http://olms.cte.jhu.edu/olms/data/resource/5016/LASW%20Article.pdf

Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). *Investigating the links to improved student learning: Final report of research findings* (Learning from Leadership Project). St. Paul, MN: Center for Applied Research and Educational Improvement, University of Minnesota. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf

Louis, K., & Marks, H. (1998). Does professional learning community affect the classroom? Teachers' work and student experiences in restructuring schools? *American Journal of Education, 106*(4), 532–575.

Marsh, J. A., Sloan McCombs, J., & Martorell, F. (2010). How instructional coaches support data-driven decision making. *Educational Policy, 24*(6), 872–907.

Maxwell, J. A. (2008). Designing a qualitative study. In M. L. Bickman & M. D. Rog (Eds.), *Handbook of applied social research methods* (2nd ed., pp. 214–253). Thousand Oaks, CA: Sage.

McAnuff-Gumbs, M., & Verbeck, K. (in press). Toward a multi-level model of professional learning communities to guide the training and practice of literacy coaches. In H. Yang & S. Wang (Eds.), *Cases on online learning communities and beyond: Investigations and applications.* Hershey, PA: IGI Global Publishing.

Muijs, D., & Harris, A. (2006). Teacher led school improvement: Teacher leadership in the UK. *Teaching and Teacher Education, 22*(8), 961–972.

Murphy, J. (2004) *Leadership for literacy: Research-based practice, PreK-3*. Thousand Oaks, CA: Corwin Press.

Murphy, J. (2007). Questioning the core of university-based programs for preparing school leaders. *Phi Delta Kappan, 88*(8), 582–585.

Onwuegbuzie, A. J., & Leech, N. L. (2007). Sampling designs in qualitative research: Making the sampling process more public. *Qualitative Report, 12*(2), 238–254.

Owen, S. (2005). The power of collegiality in school-based professional development. *Australian Journal of Teacher Education,* 30(1), 1–12. Retrieved from http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1391&context=ajte

Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision, 18*(3), 240–258.

Powell, R., & Rightmyer, E. C. (2011). *Literacy for all students: An instructional framework for closing the gap.* New York, NY: Routledge.

Richardson, J. (2005). Transform your group into a team. *Tools for Schools, 9*(2), 1–8.

Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why – Best evidence synthesis iteration [BES]*. Wellington, New Zealand: Ministry of Education.

Rosemary, C. A, Roskos, K. A, & Landreth, L. K. (2007). *Designing professional development in literacy: A framework for effective instruction*. New York, NY: Guilford Press.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* New York, NY: Currency.

Servage, L. (2008). Critical and transformative practices in professional learning communities. *Teacher Education Quarterly, 35*(1), 63–77. Retrieved from http://www.teqjournal.org/backvols/2008/35_1/10servage.pdf

Spanneut, G. (2010, Spring). Professional learning communities, principals, and collegial conversations (In My View). *Kappa Delta Phi Record*, 100–103. Retrieved from http://www.kdp.org/publications/pdf/record/spring10/Record_Sp10_Spanneut.pdf

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change, 7*(4), 221–258.

Strahan, D. (2003). Promoting a collaborative professional culture in three elementary schools that have beaten the odds. *Elementary School Journal, 104*(2), 127–146.

Strauss, A., & Corbin, J. (1998). *The basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Supovitz, J. A., & Christman, J. B. (2003, November). *Developing communities of instructional practice: Lessons from Cincinnati and Philadelphia* (CPRE Policy Briefs RB-39). Philadelphia, PA: Graduate School of Education, University of Pennsylvania.

Talbert, J. E. (2010). Professional learning communities at the crossroads: How systems hinder or engender change. In M. Fullan, A Hargreaves, & A. Lieberman (Eds.), *Second international handbook of educational* change (pp. 555–571). Dordrecht, Netherlands: Springer. Retrieved from http://www.stanford.edu/group/suse-crc/cgi-bin/drupal/sites/default/files/PLC-chapter-Talbert-2010.pdf

Vernon-Dotson, L. J., & Floyd, L. O. (2012). Building leadership capacity via school partnerships and teacher teams. *Clearing House, 85*(1), 38–49.

Walker, B. J. (2008, August). Literacy leadership and literacy coaches. *Reading Today, 6*(1), 18. Retrieved fromhttp://www.reading.org/General/Publications/ReadingToday/RTY-0808-leadership.aspx

Wallace Foundation. (2012). *The school principal as leader: Guiding schools to better teaching and learning*. New York, NY: Author. Retrieved form http://www.wallacefoundation.org/knowledge-center/school-leadership/effective-principal-leadership/Documents/The-School-Principal-as-Leader-Guiding-Schools-to-Better-Teaching-and-Learning.pdf