

# The Use of the Teaching and Learning Critical Pathway

A Case Study of a Family of Schools  
Teaching and Learning Network

A research report published by the LNS Research,  
Evaluation and Management Team April 2009



reach every student



## Table of Contents

I. Introduction .....	3
II. Influencing classroom actions of teachers through PD .....	6
A. Professional Learning Communities or Networks .....	10
B. Summary of Literature Review .....	13
III. Methods of the study .....	15
IV. Findings .....	17
A. Network structures and processes .....	17
1. <i>Network Processes</i> .....	21
2. <i>Resistance and Buy in</i> .....	23
3. <i>Personalization of school team processes</i> .....	26
4. <i>The role of the literacy coach within the wider network processes</i> .....	29
5. <i>Evolution of network structures</i> .....	30
6. <i>Summary of Network Structures and Processes</i> .....	32
B. The Teaching and Learning Critical Pathway .....	34
1. <i>Roles of the participants in the TLCP processes</i> .....	36
2. <i>Characteristics of the dialogue within the collaborative processes</i> .....	43
3. <i>Potential benefits of TLCP for teacher professional learning</i> .....	49
4. <i>Summary of The Teaching and Learning Critical Pathway</i> .....	55
V. Report Conclusions .....	57
VI. References.....	62

## **I. Introduction**

This report reviews a teaching and learning network within one family of elementary schools an urban district school board. The research from which this report is drawn is case study research that used transcription data from recorded meetings and interviews conducted over a three month period from March-May 2008. This study's focus was on collaborative processes occurring and the potential professional learning that resulted in classroom change as a result of these collaborative processes. The study did not look at specific classroom activities occurring. Instead, it followed the various different kinds of collaborative meetings and documented individual participants accounts of what occurred and how they felt it changed or did not change the way they went about their work.

The research found that this network is designed to focus on teaching and learning in literacy through various nested professional learning communities which have a common focus- a model of instructional planning called the Teaching and Learning Critical Pathway (TLCP). This instructional planning model will be the focus of the 2<sup>nd</sup> half of this report. For now, the TLCP is a model that is closely aligned to Fullan, Hill and Crevola's Critical Learning and Instructional Pathways that supports what they refer to as 'nested cycles' of formative assessment, personalization and instructional practice in literacy (Fullan et. al., 2006, p. 63). Using a school networked design to support and enhance TLCP work within school teams is a potentially effective approach towards building individual teaching capacity and individual principal leadership capacity through processes of collaboration and collegial inquiry.

It is an approach to school change and improvement efforts that is centered on each teacher's individual, varied but common experiences in their classroom and school-based PLC. The network uses these experiences as a way to inform work across schools collectively. While this type of networked learning needs careful thought and support that can challenge the expertise of leadership at both the board and the school, it also offers some exciting possibilities for community building amongst schools which is focused on building purpose and efficacy through individual and collective action and inquiry towards improved student learning and achievement.

This study has three central purposes:

- To describe the processes and roles, which operate within this network
- To consider the characteristics of this networked learning approach in regards to its potential as an organizational tool that enhances teacher and leadership professional learning
- To consider the ability of this structure to respond dynamically and flexibly to diverse individual learning and initiative while still providing central support in school and teacher improvement and learning

The report has been divided into various sections in order to connect this network's approach to teacher learning and development to the research to relevant research literature in this area, provide a sense of the nature of the study and describe the findings of this study. It will do this through the following sections:

- Influencing classroom actions of teachers through PD
- Methods of study
- Findings
  - Network Structure and processes
  - The Teaching and Learning Critical Pathway

Through these sections the report will first provide a brief literature review which situates the importance of networked learning and professional learning communities in supporting teacher professional learning that stems from and influences classroom practices. The report will then provide a brief discussion on the methods used in this study. It will then give an overview description of this network structure, its purpose and the ways that it is supported and operates across the school year. This overview will set the stage for a more detailed discussion of school team collaboration, which is the focus of the network itself. The report will conclude by highlighting some key points as well as offering a critical perspective of the potential and the challenges in using this type of organization to enhance school and classroom improvement in student learning and achievement.

## **II. Influencing classroom actions of teachers through PD**

Local school districts are instrumental locations/organizations through and by which many provincial and national reforms are driven (for a specific example see, DFEE, 2001). Initiatives created at central levels of government often utilize the local district to drive or scale up reforms into classrooms and schools. In considering the term *scale* and the challenges embedded within scaling initiatives into classroom spaces, Coburn (2003) argues that four dimensions need to be considered, depth, sustainability, spread and ownership. Here, scale represents the depth in which teachers have embedded new initiatives into their belief structures or the ways they view their roles as well as student learning; the degree to which any particular initiative is sustained within the daily and ongoing classroom experience; the degree to which an initiative has spread to all classrooms within the district and the degree to which the initiative is no longer ‘owned’ by an external person or organization but rather becomes ‘owned’ by the teachers themselves (Coburn, 2003).

Using this dimensional outline of scale helps to more clearly articulate the various and diverse challenges that districts face in bringing any initiative to life systemically to all classrooms. Within this framework, an initiative or policy is a social and personal process for teachers rather than a passive document that is ‘used’. In using this dimensional lens to view reform policy implementation through professional development designs, the complexities embedded within scaling up any initiative become transparent. In order for school districts to be successful in bringing new initiatives or change to schools, their initiatives need to influence the ways teachers think about themselves as well as their

roles as teachers. This is not an easy thing to do as it is subject various personal and organizational challenges.

Formal lines of power that exist within both district and school hierarchies may complicate this process (Ball, 1987, Blase and Anderson, 1995). As policies become district and school directives, teachers become positioned as passive recipients of these directives but are also actively and continually accepting, resisting, ignoring and changing such directives at very personal levels (Ball, 1987). As such, any 'new' initiatives may serve to outline territories of power within the 'loosely coupled' structures that classrooms occupy within schools (Weick, 1976).

These territories are dynamic and shifting, language such as 'collaboration' can become co-opted by people in formal positions in order to direct prescribed changes rather than create emergent consensus (Hargreaves, 1991). Doing this may serve to further exasperate static power relations within traditional school and district hierarchies.

Sarason (1990) argues that these types of interactions can create irrational organization effects which may constrain the ability of any PD activity to systematically achieve both the depth and the ownership within Coburn's (2003) ideas of scale. On a slightly different front, Little (1995) found that initiatives which create new positions and offer new opportunities for teacher leadership can become contested as these positions interact with the school's traditional secondary school hierarchies. Little (1995) found this to especially be the case when heads of departments and teachers identified as 'leaders' of a

new initiative started to work on areas of the subject departments which traditionally sat within the domains of the head of the department.

This dynamic may be relevant in considering such initiatives as on-site coaching positions within elementary schools as these positions carry new formal lines of authority that naturally will integrate with traditional school hierarchies. When these relationships work and the coach, school principal and teacher are all aligned, various possibilities may be created. But when these relationships conflict or when people disagree, positional power and contested authority can become barriers for teacher professional learning and classroom action (Little, 1995). Equally, the collegial status commonly held by most school teachers and the relative authority that is embodied in new roles such as on-site coaches can create tension as groups of teachers begin working together and agreeing on collective actions within their own classroom spaces (Cameron, 2005). When agreements are not followed by individual teachers within their classrooms, the collegial relations of equal status are tested against these new roles or relations amongst teachers. In England, the Advanced Skills Teacher initiative which identifies the 'high flyers' and provides them with more time and money to support other teachers is a good example of such a possibility (Bennett, 2007). At the district level, initiatives are subject to a number of similar political processes which affect what is introduced and how, to individual schools. Radner and Ball (1996) highlight this in discussing the restructuring of England's local authorities (school districts). Here, new positions like coaches and their resulting partnerships within schools are subject to the various pre-existing ways and relationships that local authorities have already established with schools across many years.

As mentioned earlier, Sarason (1990) sees these dynamics as irrational effects embedded within organizational hierarchies. What Reeves (2007) may consider as the 'Toxic 2%' of teachers that resist new initiatives, some policy sociologists see as positional hierarchies and the ways people interact in these organizations (e.g. Ozga and Lawn, 1988). Equally, Gitlin and Margonis (1997) argue that rather than look at resistance to change as a toxin, resistance may, at times, be just plain good sense given the busy and intense experiences of classroom teaching.

Regardless of the frame of reference or stance taken in looking at the capability of professional development designs reaching teacher actions, this discussion has tried to highlight some of the possible reasons that these efforts have had difficulty in reaching classroom spaces. Here, the pre-existing sets of conditions and ways that people interact within these organizations can predicate against new interventions gaining purchase within classroom experiences (Datnow et. al., 1998).

But some professional development activities do influence teacher actions and are successful as a means to teacher professional learning (e.g. Penuel et. al, 2007, Earl and Katz, 2006). Understanding more about the common characteristics that these various efforts have is an important part in designing professional development activities of any sort. In a large-scale study of a PD project designed to develop inquiry-based science teaching in elementary and secondary classrooms, Penuel et al (2007) highlight key characteristics which can be synthesized into a typology of six important elements which

they argue are common factors in professional learning activities that result in change of classroom actions by teachers:

- Time within PD for planning and reflection
- Coherence or alignment of PD to district and school change efforts
- Proximity of PD to the classroom
- Flexibility of PD to adapt to individual and school needs
- Frequency or amount of opportunities that teachers have in exploring any one initiative more deeply
- Community or teacher group/team involvement beyond individual actions or learning of one teacher

They first created a rough typology from a wide literature review of research of diverse PD activities. They then tested and refined this typology against their own research of science PD on student inquiry. They argue that these areas are critical in any PD design in order to achieve the depth and ownership that Coburn (2003) sees as instrumental dimensions in evaluating successful reform efforts. With this in mind, this review will now look more closely at school improvement attempts through the use of school networking and notions of professional learning communities which are the central concern of this report.

#### A. Professional Learning Communities or Networks

Although a common part of school change literature since the early 1990s (e.g. Lieberman and McLaughlin, 1992), professional learning communities and network learning groups are relatively new and emerging ways in which schools and districts are re-organizing reform and change efforts. In reviewing network learning communities, Earl and Katz (2005) highlight the potential for networks of teachers to tap into both

outside knowledge and tacit knowledge in finding deeper meanings both collectively and individually about classroom experiences and student learning. Here, they discussed the Network Learning Programme in England to outline the potential as well as the key areas through which to consider in building 'new' knowledge through a network. They argue that these communities need to be inquiry driven, collaborative and sustained through relationships (Earl and Katz, 2006). They rely on trust and are driven by collaborative inquiry. As such they both address the classroom and school milieu while at the same time drawing from outside these specific contexts to find deeper meanings from experience. They are thus designed to query theory as a means to gain a deeper understanding both collectively and individually about practice. As such, these designs can be seen as a response to the static structures and hierarchies in which most educational processes in districts and schools operate (Leiberman, 1992).

But these types of groups have a plastic like organizational characteristic. They seem to be able to fit any group of teachers for any purpose (Frankham, 2006). Although far from the principles that underpin these ideas, professional learning communities can be easily used as substitute for divisional or departmental meetings. These communities are also often flat structures that can operate outside the formal structures with which schools work. As such, they are fragile and may be subject to the same types of reform and institutional pressures that can undermine coaching.

That said, preliminary review of Ministry of Education's LNS-led Ontario Focused Intervention Partnership suggests that these collaborative groups may be able to bridge

the divide from simple implementation to ownership of change process and knowledge creation as they can structurally support all six of Penuel's (2007) characteristics discussed earlier (CLLRNet, 2007). These types of groups may also be a way to create a 'hub' through which initiatives can be disseminated and owned across a number of schools. Both district-based workshops and on-site or district-based coaches can easily work within these structures in ways that support areas which these PD designs may struggle with e.g. community and coherence/alignment to school change efforts. .

On the other hand, both PLCs and networks are also extra-curricular within the busy existence of teachers' daily experiences and can be co-opted by the logistics, agendas or prescribed/inflexible reform policies. Britzman (1989) uses voice as a way to explore classroom power dynamics. It seems that this frame of reference can also be used in exploring the wide variety of things that fall under networks and especially PLCs. Here, formal and informal organizational lines of influence can challenge and co-opt the collaborative or collegial relationships in inauthentic ways (Blase and Anderson, 1995). This may especially be the case when these groups are operating within and/or against the school's traditional hierarchies.

Little has explored the conditions and variety of teacher talk within schools for over 25 years (e.g. Little, 1982 and 1995). She has discussed deep and shallow ways in which teachers interact within the norms of collegiality. This highlights the complexity of accountability within schools and teachers where the majority of daily critical decisions for schools are for the most part made by teachers in isolation within their classrooms. In

considering networks or PLCs, who is accountable for what seems uncertain and may systematically or uniformly challenge districts' capability to scale up specific reform initiatives. While at the same time, pre-scribing or defining strict lines of pressure or accountability could constrain the dynamic nature from which these groupings draw their deepest meanings (Earl and Katz, 2006). In short, it seems that these groups may need a careful, specific type of formal leadership which nurtures, aligns and empowers these groups to create new actions individually and collectively. That seems a daunting task for any leader that may need further research. As such, leadership within PLCs and networks is a central area of focus for this report.

## **B. Summary of Literature Review**

This review has highlighted some of the implications designing PD opportunities through school networking and professional learning communities that influence teachers' actions in classrooms in systematic ways. It has done this first by outlining some of the challenges of the context of schools and districts and then by looking more closely at some implications of using school networking and PLCs in attempting to scale district level reform up into all classrooms. In returning to the four dimensions of scaling up that Coburn (2003) outlines, it seems critical that in order to address depth, ownership, sustainability and spread of any initiative, the capacity building design of any reform policy needs to address two areas. As Penuel et al (2007) argue, it needs to address a collective sense of change and message to the community of teachers at which it is directed at the same time that it is located within and empowered by the specific contexts in which schools, teachers and classrooms exist. It also seems important that these two areas need to somehow connect to and interact with each other serving as what Earl and

Katz (2006) call outside knowledge and tacit knowledge. But this is not an easy thing to get right. Much of reform policy creation and implementation is contested and positioned within each organization from which it comes, through which it goes, and for which it is inevitably intended (Ball and Bowe, 1991). The school network which is the subject of this report has the qualities that Coburn and Penuel et. al discuss embedded within its design. Looking more closely at the experiences of schools and board personnel who are participating in this network will help further unpack the potential for such designs to influence teacher professional learning that results in student improvement and learning.

### **III. Methods of the study**

The methodology for this study is based on case study research about processes of school change and educational policy which uses case study research to explore the immediate social experiences within policy initiatives as a way to understand education policy (e.g. Radnor and Ball, 1996, Datnow et. al., 1998). In this particular study, observation and unstructured interviews were used in order to unpack the experiences of the superintendent, literacy coaches (Litco), principals and teachers as they work to improve student learning and achievement.

Field notes and audio transcriptions were the main sources of data. In total ten different types of full day meetings across the network were observed and recorded across a three month period. The meetings were as follows in order of frequency:

- 4-Teacher PLC- with principal, litco, superintendent and LNS Student Achievement Officer (SAO) participation
- 3-Meetings with superintendent and LNS Student Achievement Officers
- 2-Litco PLC- with litcos, SAO and superintendent
- 2-Cross network focus groups of teachers from all 17 schools
- 1-Principal PLC- with principals and superintendent
- 1-Network meeting with teams from all 17 schools, principals, litcos, SAOs, teachers and superintendent

Unstructured interviews were conducted during these meetings, were recorded and later transcribed. In total, the study produced a transcript of approximately 25,000 words. The transcription was analyzed using emergent analysis (Lofland and Lofland, 2005). In following Lincoln and Guba (1985), all data collected, selected, analyzed and explicitly used here represents various different ‘purposive’ samples for this case study (Lincoln and Guba, 1985). Each sample represents key voices or areas within this work as well as

reinforces both what is typical about the experiences discussed and what is critical to understanding the school network within local contexts (Lincoln and Guba, 1985). All participants of this study are given false names to preserve personalisation while still providing anonymity.

## **IV. Findings**

This section will discuss two main areas of this teaching and learning network:

1. Network Structures and Processes
2. The Teaching and Learning Critical Pathway

The findings start by providing a broad, descriptive view of the network and the roles that leaders and teachers play within the network. In this section, the report discusses teacher and principal resistance and buy-in to participating in this network. It looks at the role of leadership within network processes and finishes with the ways that the network changes or is a dynamic structure which evolves from the processes of collaboration amongst schools.

The second part within the findings takes a closer look at school team actions and dialogue. This part focuses on the specific dialogue and roles of the participants, teachers and leaders, within the school teams. Here, the report will discuss the kind of dialogue that occurs within the TLCP process and the potential of this kind of PLC to provide professional learning that influences classroom actions of teachers and student learning.

### **A. Network structures and processes**

The network that is the subject of this study formed in the fall of 2007. As detailed earlier, the network consists of 17 elementary schools; five of which also have intermediate (grade 7-8) divisions. It emerged as a collaborative effort between the superintendent of this family and the Literacy and Numeracy Secretariat's Student Achievement Officers (SAO). In 2005-2006, two SAOs supported four of schools within this family in a program called The Ontario Focused Intervention Partnership (OFIP).

The OFIP program identified and provided direct support to schools exhibiting lower achievement in grade 3 and/or 6 reading in the provincial assessments over a three year period. The program provided direct support to the four schools within this network predominately through a team based collaborative approach in which teacher teams became professional learning communities that established focused work most often in literacy instruction, assessment and/or curriculum. The work within these four schools used an instructional planning model called the Teaching and Learning Critical Pathway. As detailed at the outset of this report, the TLCP is an instructional planning model that is closely aligned to Fullan, Hill and Crevola's Critical Learning and Instructional Pathways that supports what they refer to as 'nested cycles' of formative assessment, personalization and instructional practice in literacy (Fullan et. al., 2006, p. 63).

The success of the OFIP program in 2006 in influencing teacher professional learning became a focal point through which the superintendent created this specific networked approach. The network was designed to leverage the work in the four OFIP schools across all 17 schools within the family. The network was supported by six literacy coaches (Litcos). One of the Litcos is a full time board-based coach and the other five are part time coaches in schools with release time from teaching duties to work as a coach in their school and a select number of other schools. The network is divided into five clusters based on school demographics and/or program similarities e.g. the five schools with intermediate divisions form one cluster.

A Litco is assigned to each cluster and four of the clusters have a host or lead school that was a part of the OFIP program the previous year. The other school cluster is nominally led by a school that is participating in the School On the Move Program, another Literacy and Numeracy Secretariat program for schools showing trends in improvement over a three year period of time. Each host school of a cluster is meant to serve as a lead school or catalyst school within the TLCP process. Differing from some school network structures, clusters are not the focal points for the collaborative work. They are the organizational grouping through which the larger network meetings run as well as the first point of contact between teachers and principals outside of their own school. If a principal wants to touch base with another principal or if a grade 2 teacher wants to see how other teachers approach the grade 2 curriculum, they do this through the cluster. The cluster is thus a point of contact and a way through which the larger network is predominately organized and run. As such, clusters are an organizational tool designed to develop and enhance local principal and teacher relationships across schools.

Throughout 2007-2008, there were four large school network sessions where all schools participated. These larger sessions serve as touch stones and development points through which school teams got opportunities to learn from others, share experiences and develop a common collective identity around their team-based TLCP approach to classroom improvement. The common experiences of participating in a TLCP are shared by each school. This common experience of working within a TLCP is an important aspect of the networks purpose and design. It not only provides common ground for cross-school

collaboration but also situates the classroom as the focal point of the network. Paula, the superintendent highlighted this in discussing the purposes of the large network sessions:

One is to build instructional leadership capacity. Two is we all have common, shared learning experiences that becomes a common framework and there's consistency of language and talking about our work right across the family. So you slowly begin to develop this consistency of language, of shared purpose, of talking about our work, of approach and a whole number of things. The other piece is, you bring people together and allow them to disagree and have a cross pollination of ideas across the levels in the school. In these meetings you find the Litco is there, the principals are there and the teachers are there. This cross pollination is very important. There are four sessions throughout the year. It is a different pathway with a different kind of agenda. It's layering and nesting one within the other. To do the nesting is how change happens. [Paula]

The superintendent serves as the main driver or leader of the network structure currently in place. She holds regular principal PLC meetings and Litco PLC meetings that also focus on the success of the school based TLCP work. These meetings serve to provide Paula with a litmus test of each school team's progress in their TLCP work. They also inform Paula of areas of development, emergent possibilities and potential directions which shape the larger network sessions across the year. In these ways, the team/individual work within the TLCP is the material from which the larger network processes are drawn, facilitated or directed. For example, the Litco's work, the principal's work and/or the teachers work shape or influence team pathway processes occurring across the year. These pathways inform the direction and shape of the entire network on an ongoing basis. Looking more closely at the ways that this occurs is a central concern in this report. The report will do this through a discussion that is divided into six different sections as follows:

1. Network Processes

2. Resistance and Buy in
3. Personalization of school team processes
4. The role of the literacy coach within the wider network processes
5. Evolution of network structures
6. Summary of Network Structures and Processes

### *1. Network Processes*

As emphasized earlier by Paula, several network purposes and beliefs emerged from the data in this study. The network's structures and processes are designed to build:

- team/individual capacity in assessment, instructional practices and curricular integration through the co-construction of new knowledge within team-based focused collaboration  
Which in turn contributes to...
- school capacity to use and develop resources (of any kind) and individual knowledge through:
  - developing coherent, relative and collaborative short and long term planning
  - building collaboration, inquiry and risk taking for all school members
 All of which in turn contributes to...
- family of schools capacity through individual expertise within group interaction in the divisional team pathway process

These purposes are supported by an explicit theoretical position on learning for both students and adults within this network. Learning is ...

- context specific/dependent
- a dynamic process that involves peoples' previous knowledge/experience and new knowledge/experience
- a process which builds individual and collective confidence, efficacy
- a process which sets a framework for more learning
- a process which requires some form of application by teachers in their classroom and principals in their schools

These beliefs inform the approach to networking amongst teachers and school leaders as well as the types of meetings and structures from which the network is constructed. They

are revisited often in discussion and serve to position challenges or critical feedback from formal leadership. This is evident in a conversation that Paula has with one teacher during a PLC meeting.

CASI and DRAs—they are sort of guide lines. They are good reference points for teachers but we are not teaching to CASI or to EQAO. Going back to this... if you track kids at level 3 and 4 right at the beginning of a pathway for learning, then we are seeing...where we need to focus. That child indeed has a very rich understanding of... meta-linguistics. You know her better than I do, so maybe you might say this child does know but she needs to develop more precise language.  
[Paula]

In emphasizing the teacher's own knowledge of the situation while still offering critical feedback in the ways this teacher is using data to level students, Paula is revisiting a belief structure that is centred on the teacher's own context and knowledge of their practice. She frequently would emphasize that she was not the superintendent directing or mandating but rather 'having a professional conversation'. In so doing, the hierarchical relationship of superintendent to teacher becomes one of practitioner to practitioner. But this is not an easy shift within school and board hierarchies and needs constant attention especially when there is disagreement or resistance within this collaborative work. In a Litco PLC meeting, Paula speaks to this fragility.

How do we resolve that conflict? That is critical [for] the Litco. How do we resolve this conflict? If you confront the teacher, you have to say 'No you are not going down that way, you are going this way' without getting that teacher upset because you have to acknowledge that that teacher is a teacher that has two or three around that table that defers to him. And the Litcos are very astute at this. [Paula]

How 'astute' the Litcos actually were at redirecting teacher resistance or disagreement varied amongst the six Litcos and within the situation in which they found themselves. Formal leaders and facilitators all faced difficulty or tension in following beliefs and structures which privilege the classroom teacher's own authority and understandings

while still providing pressure or attempting to redirect teachers in different directions. When school teams were working well collaboratively, this was less of an issue but when teams, principals, Kathy (the SAO), or Paula were not aligned with their understandings, these issues were harder to negotiate. Thus, a structure and framework designed to build buy in and ownership also was challenged in dealing with resistance.

## *2. Resistance and Buy in*

Resistance to change is implicit within any new initiatives introduced within schools. The resistance encountered by principals in the first year of this program came from two general areas. Teachers were satisfied with what they were doing, thought it was successful and did not feel that change was necessary or relevant. Teachers also felt there was not enough time in their day to take on something new given the demands of the work already. One principal, Sally, expresses her struggle to get her staff on board in this way:

The teachers felt that they all have outstanding programs and they do have good, well established programs. Um, trying to tell that they need to learn new strategies and build more cohesiveness within grade teams, that was difficult and still is a battle because every time we sit down to meet, there's still this discussion 'Well I teach the French immersion class and the French immersion kids have a different level of literacy then the regular English kids' you know. So that's been a real issue in our school in terms of breaking down those barriers... [Sally]

The barriers in getting staff on board were diverse and to certain degrees institutional. Some teachers expressed frustration in feeling like the network and new activities embedded in participating in this program labelled them as a failure that needed to change. Others as Sally relates, did not see the relevance of the work to their own classroom and their students. Getting buy in to a program that essentially is driven by teachers was critical to the success of the network. The network requires active

participation by school teams while still honouring the relevance of their existing work. At first, many principals addressed resistance from their staff by bringing staff that were already on board to the network sessions and trying to cultivating champions of the initiative within the school. But this technique created what one principal, Mark, called 'passive' resistance.

So last year, my goal was to bring the leaders from the school who could have an influence. So those were the people we chose for the sessions. My observations was it was still a passive role and they were just attending another workshop that was just run by one of their colleagues. So this year, we would bring the resisters to sessions run by LNS and they would see it. And secondly, we would make a pathway a constant for them so now they are now doers. And it worked. [Mark]

Here, Mark shifts his tactics in getting his staff to participate in the work by inviting resistant teachers into the work rather than pulling them along through other lead teachers. As Mark relates participation in the network seemed to help bring teachers on board in that they were able to see value, identify with a collective effort and participate in the work from a broader perspective than just the TLCP work within their school team.

As Sam, another principal, states:

So having teachers brought into sessions with administrators along the way really helped our credibility. They would tell teachers first hand how other teachers are doing it and became strong advocates. So it's not coming from us top down its coming from their peers. That's much more effective. [Sam]

In establishing the collective identity of teachers across the family as a driving force of the network itself and localizing the professional learning at these large network sessions so that the material of the workshop is the work of the teachers, many teachers were able to see the relevance as well as understand their own impact or influence within the

program. One literacy coach, Ann Louise, set relevance as a challenge for the teachers to solve within an arts based school:

One of the schools that I have been working at all year is an arts based school. So at the beginning of the year there wasn't a lot of buy in but when I asked, 'what's the art connection we can make?' , they rose to it. If a teacher has something they've done in the classroom, you always want to pull that out and show that. Show that to us, show it to the group. [Ann Louise]

When the network meetings were successful, teachers were able to tap a wider community of practice while still maintaining the relevance of their own classroom and school work. They were able to compare understandings of learning and perceptions of student skills against a broader canvas than their own work or that of a few other teachers within their school. This may be an important aspect of any networked school strategy building- a connective identity of practice through joint or common work as teachers. The relevance of the work in terms of their students' response to learning from the activities planned through the TLCP also seemed to be an instrumental part of getting teachers on board. One principal, Tabitha, describes this dynamic in the following way.

All teachers theoretically and logistically know what their purpose is and have a sense of purpose, but when they see the kids getting excited then it touches the emotional piece of their sense of purpose. That really excites them and drives them. [Tabitha]

Here, Tabitha touches on, what she feels engages teachers, student learning. When teachers saw an effect in their classrooms from doing work established as part of the TLCP or the network, they bought into the program. Equally, the common experiences of this type of classroom effect throughout the 17 schools participating arguably may be an important part of the collective identity referenced earlier.

Although the network was clearly successful in bringing many teachers on board, there was also a significant variation amongst schools and school teams in how comfortable they were with the process and how far their team had taken the TLCP in terms of intentional risk-taking and challenge as a PLC. This signalled the great degree of variation that was embedded within the participating schools and raised interesting questions as to how the network structures could deal with this diversity.

### *3. Personalization of school team processes*

Within the network there are 35 to 40 school teams participating in the TLCP process. Each school team is at a different stage of development in their understanding of the various areas of planning, assessment and curriculum embedded within the TLCP process. Where some teams are working on their 5<sup>th</sup> pathway cycle others are just starting. Additionally, teams do not evolve or develop within the process at the same rate. In one school, a junior division team was taking on the process with much more intensity and risk taking than their intermediate division colleagues. This served to create a huge amount of variation across the network in terms of where teachers were in the process, their understanding and their buy in to the TLCP. The ability of the network to respond to each team's context and allow development, adaptation and progress to move at a pace that was more or less set by the teachers is a strength of this approach to teacher professional learning. Variation and diversity were recognized and to certain degrees embraced in the work. Paula and her school principals highlighted the importance of being patient and flexible within the work. Paula states:

You have to begin at one entry point and slowly grow and grow it. And as you grow it, we capture it in diagrammatic form. So we have to have a high tolerance for patience. Some schools are at the 5<sup>th</sup> pathway. Some are at the 2<sup>nd</sup> starting their third. Some are at their first pathway. So the experience of working as a team with the Litco as a catalyst is what I call the glass spiral stair case because as a spiral, they come back to the same point but one notch higher. And they go up the spiral again and one notch higher. The more spirals they achieve, the more evolved and more risk they begin to take and ownership... and the teacher confidence comes up. [Paula]

Here, Paula highlights personalization of teacher development as an instrumental part of the network's design. The program does not apply a prescribed set of 'non negotiables' but rather works from the teams own context as the starting point and trusts that this will evolve as the teams work through one pathway to the next. Pressure and urgency for change within this model stems from opportunities to both participate in the work as an individual within a team and to share other school teams' experiences in doing the same. When school teams progress within the TLCP, pressure becomes an internal aspect of their professional accountability. Closely tied to the relevance of the experience on the learning of their students as mentioned earlier, teachers that adopted the TLCP process began to push themselves first and the team second. However, this also allowed for passive resistance to the process or 'going through the motions' without taking on the personal pressure to take risks and drive reflective inquiry. There was evidence of resistance to the TLCP and leadership's attempts at bringing more challenge in team conversation. Regardless, the formal leadership within the network stood by this approach and trusted that progressive development would occur through a collective sense of pressure combined with literacy coach support and principal participation. Elton, another principal, described this type of leadership in this way.

I think it's also important to take on the traditional role 'This is where we were. This is where we are and this is good stuff but how do we make it better?' So no

one is feeling diminished or threatened because your starting spot is not where other people's starting spot was. We all start somewhere and that we are all moving. So (we) feel that sense of 'Wow, this is great, look how far we've come? And this is great that we are on this path.' So no one ever feels that we were supposed to be perfect in the first place. [Elton]

While this often builds a safe environment for teachers to reflect and take risks, the degree to which it will capture the quiet resisters remains uncertain. Paula believes that the way to bring sceptical schools and school teams on board is not through mandate but rather by -to certain degrees- ignoring them.

The member schools all have a different narrative. And within the member school, the teacher teams, they all have a different narrative. And they may have a different perspective of where they are at. (Some schools) don't view that they belong here. They think they are outside it. But we are dragging them, and pulling them and they are coming along. For the longest time, Leanne (a Litco) went in for a while. It wasn't very productive so I said 'Stop going.' And one day I got a call because I still included them at the family of school level and the principal and vice principal called me and said 'Paula can you come in and have a conversation'. So when I arrived they said, 'We are not part of it' and so I said 'How do you want to be a part of it? What do you want?' So you have to be very patient. [Paula]

Here, Paula keeps a school of resisters in the larger collective loop while removing the school-based support of her Litco who was a vital element in the work at the school team level. She is 'dragging and pulling' them by combining relatively light board pressure to participate with collective school and teacher pressure for involvement; as opposed to heightened hierarchical application of pressure to conform to a preset process. In this case, it seemed a successful strategy. To cultivate ownership and teacher driven change within networks in general, this may be an important strategic approach to school change. Across the entire 25, 000 word transcription of meetings and interviews, the data found only one use of the phrase 'non negotiable'. Participation, it seemed, built progressive learning. Two principals highlight this point.

Even through the course of one pathway, we've noticed a shift in the ways teachers work with one another in terms of sharing and giving each other ideas. Now because of the joint planning, they are sharing ideas, sharing strategies. [Tony]

The teachers are starting to give feedback in terms of how much more effective their teaching is and how much more they expect of the kids than they used to. They used to say 'the kids can't do this. They can't answer that question', that's how it started and now we are just amazed and blown away by what the kids are actually producing. [Mary]

But these successes did not happen without access to intensive and, often, external support to school teams throughout the TLCP. Success of the TLCP and the larger network relied heavily on support from outside of the school team's own membership. The team of literacy coaches were an instrumental part of network processes.

#### *4. The role of the literacy coach within the wider network processes*

This six Litcos functioned as their own PLC team, meeting monthly with Paula and the SAO, Kathy. Together, they discussed a wide range of issues that emerged throughout the network, amongst the schools. The Litcos and the SAO operated as catalysts and communicative links for the network. They built relationships with the teachers and principals and had an insider's view of these teams but were to certain degrees also outsiders. Paula and Kathy used the Litcos as points of information to locate excellent work, emergent or interesting experiences, areas of school team resistance and potential focus points for the larger network agendas. They also worked closely with the Litcos on their own development. They shared experiences and discussed various strategies. They signal the importance of support with this type of change process and the degrees to which a complex approach to school improvement needs orchestration. This is evident in

Paula's discussion of the next area of work to her Litco team during one of their PLC meetings.

When we go back to the schools we need to see whether that connection has been made from this and see what kind of connections they made of today's experience back in their rooms. Schools that are not planning from a big idea but a cluster of expectations do they now go from a big idea to a cluster of expectations? ...I hear schools making the reading to writing connection and I think George Orwell (an OFIP school) helped us do that. [Paula]

Here Paula is setting an area of work with her Litco's - identifying key pieces of information which will, in turn, help inform the direction and the agenda for future work within the larger network sessions. It also informs each Litco as to how different school teams address what proved a very challenging area of work for the school teams, moving between a cluster of expectations and a 'big idea' or theme that focuses the team's work beyond a set of curricular skill areas. The focus of this network is the classroom through collaborative inquiry. Understanding the various experiences across all the school teams in order to set direction and respond dynamically to that work required a team that both facilitated the TLCP process within schools as well as functioned as their own PLC while modelling for the benefit of the larger network. They served as an instrumental part of the ability of the network to respond to emerging experiences across the 17 schools.

##### *5. Evolution of network structures*

The network, its clusters, directions and school TLCP approaches were dynamic, shifting and changing based on the experiences occurring within individual school teams. As referenced in the last section, Litcos helped provide information to inform this process as well as the principal PLC and the SAOs. As new information came into the organization,

the network structure adapted. A key example of this type of shift occurred as the Litcos were discussing the kindergarten teachers from various schools in which they supported. Three different Litcos brought forward requests by kindergarten teachers to start a group within the network. As the conversation carried on and more input was provided, the group agreed to start an after-school PLC for a few kindergarten teachers. Discussion continued and more information came forward from the Litcos about the kindergarten teachers. In the end, Paula decided to go with a fully funded day for the kindergarten teachers with follow up support for the group by the Litcos. At the end of this discussion, Paula detailed how they, the Litcos, could work in helping capture the work of the kindergarten teachers for the network's use.

One of you attach yourself; very much like my model what I do with you guys. You can drop in. And when something germinates great ideas, draw it to my attention and then we begin to mature great practices and innovation with teachers taking the leadership. That would be one indicator of success because we are moving into the realm of sustainability. The passion has gone beyond the timed network piece.  
[Paula]

Paula uses her Litcos in this instance to support an emergent group and to gain access to the learning and experiences that of this new group. The resulting influence of the group's work is uncertain as the purpose of the groups collaboration will be largely set by the teachers themselves. In having members of her coaching team help coordinate and follow the kindergarten group's work, the network as a whole may benefit. A new structure from within the network emerged as a result of the joint work and collaboration occurring across these schools. The Litcos generally serve as catalysts to these shifts in the approach and direction and the teachers, in this instance, have driven or influenced a change within the network's structures. This is an example of the potential flexibility and dynamic interactions which networked schools can capture within professional

development. What may start with one direction and focus, can move into a variety of directions and create a variety of groups and ways that teachers organize and collaborate. Throughout this though, the network needs ways to continually capture, evaluate and re-set directions in order to maintain relevance and grow in the work that it is doing. Doing this is complex and may be a considerable challenge to networked learning approaches.

#### *6. Summary of Network Structures and Processes*

This network's focus was on building better, more critical and collaborative school teams whose work would influence the ways students learned literacy. It had a dynamic organizational structure with a number of access points for the superintendent to gather information. The work was predominately driven by teachers and school principals; working well when school teams were engaged deeply in the process and having less influence when school teams were not. There was a wide variety of entry points and skills across the school teams which created opportunities as well as challenge.

As an opportunity, school teams learned and shared from a common process. They were able to compare experiences and provided access to practitioner knowledge contrary to some traditional family of school structures. This allowed for opportunities of growth, engagement and ownership amongst teachers. It also created very specific ways in which pressure and urgency for change within the network was applied. Differing from top down mandates or pressure, pressure and accountability for change was collectively owned by the teachers. For teachers that were engaged and self-reflective, challenge and risk-taking emerged as a source for growth and learning. For those that were not as

engaged, dynamics of passive resistance or “surface participation” acted as a barrier to influencing classroom improvement. That said, there was promising evidence of shifts from teacher non-participation to teacher participation and then buy-in. In unpacking these dynamics the report will now shift to look more closely at the Teaching and Learning Critical Pathway processes occurring within the school teams.

## B. The Teaching and Learning Critical Pathway

As detailed earlier, the Teaching and Learning Critical Pathway is an adaptation of Fullan and Crevola's (2006) Critical Learning and Instructional Pathway that uses a specific instructional cycle and builds structures and processes to expand teacher collaboration within school teams. It is a model of a Professional Learning Community which uses a specific planning, instructional, assessment and evaluation cycle. Its main purpose is to build individual teacher's capacity in order to better support student learning through co-constructed collaborative approaches to professional practice.

The TLCP cycle uses a 'mentor text' or a primary curricular student resource to drive student learning of a specific set of school team identified curricular areas within the language curriculum through student project work across the cycle. Each cycle has four to five formal half-day meetings over approximately a nine week period. PLCs within the school work through approximately three Pathway cycles over the course of a year. At its most basic, teacher teams within a TLCP cycle locate a few key areas of the language curriculum which is agreed upon by the school team as areas of need for their students. In school teams just starting the TLCP process, the curriculum areas chosen were generated from various student assessments including EQAO and common assessment tools e.g. Direct Reading Assessments. In school teams that just finished a TLCP cycle, the next curricular foci were often generated from the work of the previous TLCP cycle.

Once curricular areas are identified, teachers identify a large theme or ‘big idea’ as the focus to the TLCP cycle. The ‘big idea’ often related to an area of social justice or environmental conservation e.g. slavery or endangered species. But this wasn’t always the case. Some school teams used skills based themes as their big idea such as ‘the ability to examine text’. Although many teachers and principals identified the importance of a ‘rich’ big idea for guiding the entire TLCP process and engaging students, the notion of a ‘rich’ big idea was not commonly understood across the entire 17 school network.

After identifying the curricular areas of focus and general theme, teachers then plan a central task both collectively and individually, design a pre and post assessment of the curricular skill areas and moderate the project to derive understandings of where the students are and where they need to go. The connection from one TLCP cycle to the next is a critical element within this model. As just detailed, assessment and evaluation of the students’ work from one cycle informs areas of focus for the next cycle. Thus, the last meeting within a TLCP cycle serves as the beginning of the planning for the next cycle.

There is variation amongst teachers within each PLC as to what the actual teaching tasks are in their classrooms and the instructional strategies they use throughout the TLCP cycle. This is especially the case in schools that are organized around divisional teams as opposed to grade level teams. For example, within an intermediate divisional school team (grades 7 and 8), one teacher used a film-based project on slavery and the civil war using the Hollywood film, *Glory*, as the mentor text while another teacher used a role playing activity evaluating the governor New France during a specific period of Canadian history

based on a variety of historical texts. The curricular areas; point of view, organization of writing and evaluation of media, which served as the skill focus of this cycle, were the same. Equally within grade level teams, teachers may have a ‘big idea’ of animals in their environment but focus on entirely different animals or ecosystems and projects within their classrooms. As detailed earlier, the only non-negotiable that this study found embedded within these PLCs was a commitment to participate in both the PLC meetings and the individual activities in their classroom which were directly related to the planning that teachers did within the formal PLC meetings. The TLCP process is a potentially powerful learning experience for teachers working in PLCs as it blends collaboration with individual classroom actions that are grounded in assessment of student work. This section of the report will look more closely at the pathway cycle through three interrelated areas:

1. Roles of the participants in Pathway processes
2. Characteristics of the dialogue within the collaborative processes of these PLC meetings
3. Potential benefits and challenges of TLCP towards teacher professional learning

### *1. Roles of the participants in the TLCP processes*

This section will look at the key roles of participants in the TLCP. In so doing, it will highlight aspects of this work as it relates to the participants by their role. This is especially the case when the discussion moves to characteristics of the dialogue and the potential benefits of this work for teacher professional learning as situated across the 17 schools in the study. The report looks at three general roles within the TLCP: the teacher, the principal and the external facilitators/leaders that often support the PLCs.

a. Experience of teachers within the TLCP process

There is no TLCP without teachers and students. As stated earlier, the most critical norm embedded within the work of the TLCP process was teacher participation. School teams and teachers across the 17 schools within this study were at very different places in terms of comfort with the process, approaching their own work and the teams' work critically and understanding the various components of the TLCP e.g. the role of the 'big idea', assessment and teaching strategies. That said, participation and commitment to the process was a corner stone of this work within the family and was supported by school leadership, the board and the LNS. This allowed for degrees of latitude and pace in teacher professional learning which may be an important element in success fully influencing classroom learning environments. As one literacy coach, Sadie, relates in working with a team of Kindergarten teachers:

After the pre-assessment we realized the question was too hard. The question was from 'The Giving Tree' and the question was 'Why did giving things make the tree happy?' and we realized that it was way too hard for 4 and 5 year olds. So we kind of broke it up and it was 'Why did the tree keep giving things to the boy? How do you know? Where can you find that in the book? and 'What does the tree remind you of in your life?' And that made them go back into the book to find things that would support their answer. It was a learning experience. [Sadie]

The group realized that their planning was too difficult for their students. Sadie saw this as a learning experience for the team. Doing and then readjusting in response to students is a critical part of the work for teachers within these PLCs. It serves as the material of the professional learning that occurs. For participants, an important element of the work in a pathway was about trying, learning and growing as a team. Equally, principals that faced staff resistance to this way of working, dealt first and foremost with getting

teachers on board and participating. Two principals, Phillip and then Jenny describe different experiences in getting their teacher teams involved:

One of the things that has been helpful with that (getting resistant teachers involved) is when we had the LNS sessions at the family of schools. We've been invited to bring teachers along. Initially, we thought it should always be the same teachers so they could become the leaders in the school. My thoughts on that have completely shifted. I tried to involve as many as my teachers as possible so they would get the big picture. But it's being driven by the teachers. That more than anything creates the buy in because they see it as empowerment rather than something done to them. [Phillip]

The other piece that I've found and having watched this process starting in one school and coming to (another) school that is well down the path, um, the thing that I find very interesting is how important that big idea is that social responsibility or environmental thing or whatever it is that you're doing that really seems to excite the kids and it's that excitement of the kids that I have found actually is what drives the teachers. [Jenny]

In different ways, these principals relay the importance of participating and getting involved with the TLCP as the critical aspect of success. Participation for Jenny meant getting teachers to actually commit to doing the work within their classrooms and seeing the effects of this work on their students. For Phillip, it was getting the teachers involved in the large context of the work and seeing that 'the big picture' which also meant seeing that the TLCP is first and foremost driven by the work of the teachers based on the instructional needs of the students in their classroom. Here, buy-in, learning and progression came through participation and commitment rather than using any specific teaching or assessment technique.

## b. Role of the Principal

Principals play a key role within the Pathway process. They are both participants and facilitators. This requires a depth of understanding in terms of instruction, assessment and curriculum that challenged many of the principals within the 17 schools. Paula discusses this challenge within her family:

So often we build capacity of teachers and we assume the principal knows it and we assume the vice principal knows it. My assumption is not that they do not know but they need to be part of the conversation. They need to have shared experiences to have a deeper knowing. It's not that do not know about literacy or they do not know how to lead the school but if they are part of it, it levels out. It's lateral capacity building and not vertical capacity building. [Paula]

This 'deeper knowing' which Paula discusses is a key aspect of successful leadership within the Pathway cycle. Much of the work and the learning in the TLCP is a result of the dynamic relationship between collective discussion and planning and individual work in the classroom. As principals are not teaching throughout the process, understanding the work is challenging. Traditional principal roles where principals enable teachers to meet but do not participate within these meetings can result in teachers moving beyond their principal's understanding of the processes at play. One principal, Lisa, discusses the value of participating in these PLCs:

You know what's happening. You know which teachers are engaged and which may need more talking on the side. You become much more aware of what's happening in the classroom. Lot's of time you become so busy with the paper work, you don't have that opportunity. So sitting in those meetings, seeing where the teachers are going, you see what areas of development are needed, what resources are needed and what areas that you need to develop. Some of the time you just sit back and let it all happen but you go in and realize 'Hey we need this. They need this. I've learned this. I've learned a whole lot from this whole process. [Lisa]

Lisa describes her role as leader as an active one, which, through participation, she is learning what is needed. This dynamic in leadership fits closely with ideas of developing

the instructional leadership aspect of the principal's role as school leader. Within the school teams in this study the principal validated the teachers work as well as challenged the team's thinking. These two areas were a critical aspect of moving the teams thinking. This is evident in a discussion concerning assessment between two teachers, Brian and Sam, and a principal, Mary, within a formal Pathway meeting.

But we are discussing the assessment, not what we think they can get on it. If they get the pre-assessment, were done. Next thing. [Sam]

But you are saying if we worded it as only one rich open response, then they wouldn't do well. Is that not what we are testing? If they did do well, we wouldn't keep going. [Mary]

But you were talking about how we were going to word it. How-[Sam]

I almost agree if the assessment is happening in a vacuum. But Sam, you've had half a year with your class, you know, you could predict hypothetically- [Brian]

So we already know where the assessment is going before we begin? [Mary]

I'd expect that. If you're a good teacher. [Sam]

Yeah, you should. [Brian]

Mary is both asking Sam for clarification of his use of pre-assessment within the TLCP as well as his conceptions of the relationship between formative assessment and instructional practice. Brian is supporting Sam in this challenge and both are justifying their approach based on their experience as teachers. Rather than just observing or checking in, Mary is an active participant in the discussion but also the key challenger of the ways in which these teachers are situating their work. She is both authorizing their point of view and challenging it in ways that put her own instructional knowledge and confidence to the front. Critical to this discussion is not who is right but rather that the conversation is prompting teachers to reflect and rationalize their work as teachers while not creating dynamics in which there are losers and winners or powerful and less powerful.

Mary's position as principal provides space for her to make these points more easily than another teacher with no formal leadership position. At the same time, her confidence in her own knowledge of instructional practice and assessment allows for disagreement that in this case may support learning and reflection. Walking this tight rope as a leader requires regular participation in this work. It is a challenge that many principals discussed. One principal, Joanne, put it this way.

I feel as a leader that some stuff is wrong and we need to say it. That's a real struggle for me to find that balance between applauding children's work and teacher efforts and my own work but some stuff is fundamentally bad practice. As a principal, I need to find the best, polite, chosen words to say 'this is not good. It may have been good twenty years ago.' But life has changed and education has changed. That is a struggle for me to find the right words to say 'We need to stop doing this.' [Joanne]

Joanne's struggle was a commonly expressed by the principals within this research. Her ability to challenge the 'right and wrong' of instructional practice while still creating the inclusive teacher driven environment that this work requires is difficult. It arguably requires knowledge of instructional and assessment strategies as well as a clear understanding of what the teachers' positions are about these areas of teaching and learning. The importance of regular participation as the formal school leader was emphasized by the principals as a critical part of developing these areas.

### c. External leadership and facilitation

Another important aspect of TLCP sits in the external facilitation and leadership through three distinct roles: the superintendent of the family, the literacy coaches both school based and board based and the SAO assigned to support some of these schools. Similar to

the discussion of the role of the principal, external facilitation and leadership within the PLC provided validation and challenge. Additionally, this role added an important element to the team's work- an outside source of knowledge or experience that was unavailable to the teachers within the schools.

These roles were important in supporting the teams' processes. Facilitators served as a sounding board through which teachers gained confidence to try new things and provided insights which allowed teachers to see things in different ways. These points are evident in Kathy's, an LNS SAO, feedback to a junior division PLC team.

Can I throw something in? I'm just going to step in for a second and then I'll come back out. When you write that letter, back to what I said at the very beginning when we looked at the expectations, it comes from two directions. It comes from the author and you responding to an opinion, 'I think the author was effective in their opinion' kind of thing and then it comes from the student 'this is my opinion of your work'. So when you have that letter to the author, they have more than one way in which to write. They can write from 'I' or they can write from what they've read. If you do that, you don't have to worry about repetition. If you leave it open like that within this role, you'll be fine. Now I'm coming back out. [Kathy]

This was a typical way that Kathy worked. She stepped 'in' and then 'came out'. In doing this, she brought ideas to the group that were grounded in the discussions without owning the work as a classroom teacher within the team. A person in this role, whether it's the principal, superintendent, literacy coach or, as in this case, an SAO, can offer ideas not from the stance of a classroom teacher but from a relatively independent stance as an observer and critical friend. This served to add perspective, shift thinking or provide a new thought to the discussion. The PLCs across the study all had some support outside of their immediate team that provided this type of input. The support helped consolidation

and progression of each group's thinking in ways that were less common for teachers coming a classroom agenda and focus.

## *2. Characteristics of the dialogue within the collaborative processes*

Another important aspect of the TLCP process is the characteristics of the dialogue which occurs within the formal meetings. The study looked at the general characteristics of the collaborative dialogue, that is, how teachers, principals and external facilitators of these meetings e.g. literacy coaches communicated and how work of professional learning of teaching and student learning progressed through these conversations.

There were four general and interrelated characteristics of the collaborative dialogue occurring within these meetings:

- Clarification, framing and re-visiting agreed direction or action
- Validation and authorization of work shared
- Transition from a discussion into potential action or next steps
- Challenge and progression of thinking within discussions

Each general area was not discrete or isolated. They were connected and often grounded in the experiences that the teachers had in their classroom. Validation sometimes preceded a challenge. Clarifications sometimes lead to a transition or authorization.

Equally, participants sometimes took on another persons thinking or idea. A challenge to a teacher by an SAO or principal was sometimes taken up by another teacher from which it was not directed. A challenge which originated from a principal might also be picked up by another formal leader within the meeting such as an SAO or the superintendent.

The team discussions helped build and consolidate thinking from individual to the collected knowledge of the team. They served to validate work done in classrooms and

build confidence as well as challenge work and build resistance to challenges. An example can be seen in one conversation within a teacher team amongst a principal, Mary, Paula and two teachers, Harriet and Sam:

I've got the data walls in my hand. I went through these at length last night. I was noticing almost the exact opposite of that. Harriet's class stands out just because I did it last. Her lowest kids are the ones that don't seem to be moving or in some cases, they are moving backwards. The ones (the students) who started at level one, Carrey, Arthur and April ended at level one. [Mary]

It's more like. When we started 'point of view' we expected a grade 8 point view. Yeah, my kids at level 3 are lower than level 3 because they don't know what to expect yet, but by the end they will be level 3. I'd expect that. [Sam]

So although they may not move within the whole (curricular) expectation, their writing is getting better? [Mary]

Yes. [Many teachers at once]

But if you see gains, then where is the next level for you to move the child up? [Paula]

Across the collaborative discussions occurring within the TLCP processes, teachers and leaders 'tag-teamed' discussions. Paula picks up from a response to Mary while Sam and other teachers take on a question directed at Harriet. Team discussion was typical across all the PLC groupings that the study explored. It played a critical role in bringing ideas of individuals to contribute to collective understandings. It seemed to validate the work of both leaders and teachers and to build group identities that may be very important in building the confidence so that risk taking could occur within the TLCP. In terms of the broader discussion on the value of PLCs within schools, this dynamic that surfaced may be a critical catalyst to teacher transformation and learning. It is underrepresented in research literature about PLCs.

a. Clarifications, framing and re-visiting agreed direction or action

TLCP meetings start with a summary of work to date based on responsibilities and agreements that the team established in the previous meeting. This part of the discussion serves as an anchor point from which the discussion begins. Critical to the work within a TLCP, accountability is often revisited and clarified followed often by a narrative of what individual teachers experienced. Also within this discussion, modifications, based on the work teachers have done, are brought up. An example of this type of discussion is seen in Emily's (a grade 5 teacher) suggestion proposing a modification of the curricular focus on organizing writing.

I think it actually extends farther than the multi-paragraph part of it though (in response to that part of the language curriculum area read to the group). This organization (clarification of their students needs) crosses over into the media. Things like-last week we saw the comic books that were made. That in itself is a huge organization in terms of their writing as well as the media that is being seen. Or Lisa with the organization of the articles in there as well as the articles themselves so there's a lot of crossing over with media. Not everything that we do is about the multi-paragraph writing. [Emily]

At the start of this particular meeting Emily is suggesting that the work goes beyond the curricular skill area to include other areas of literacy or media documents. She includes another grade 5 teacher, Lisa's, work as an example to build support to her idea. This is part of typical interaction within the meeting. Teams revisit, amend and modify as they work through the TLCP cycle and learn from their ongoing work in their classrooms.

b. Validation and authorization of teacher experiences

Throughout TLCP meetings, teachers and leaders are continually validating and supporting each others work as a group. This type of dialogue is brought forward from all

team members and is often used by external facilitators and leaders as a means to honour the efforts of the team as well as position any hard feedback or challenges that they may want to bring forward. Equally, teachers validate provide authority of action to each other through conversation. In one discussion with a junior division team Paula validates and synthesizes four different teachers' points before offering an idea for the team to consider.

From all three of you, when you spoke about this-all of you have made observations of your students moving along a continuum of deeper understanding. Like you just said Emily, that they started picking articles or items that are not as complex and are moving to items that are more complex in the issue. What you raised Corey, 'Is it the Star or is it the Sun?' There might be value to just bring in a whole supply of the Star and the Sun and compare how they cover and issue in Tibet or a local issue. [Paula]

Here Paula situates an idea by first validating the experiences of the team. As a leader, she situates her feedback within the context of the teachers' discussion while at the same time recognizing the work of the teachers helping students to move 'along a continuum of deeper understanding'. This type of dialogue is instrumental in bringing new points, potential challenges and next steps or transitions into the discussion. It serves to ground the discussion within the context of the teachers' classroom experiences and narratives.

### c. Transitions from a discussion into potential action or next steps

The third general characteristic of the dialogue within the observed TLCP work in this study served as an action point. It was used to bring a team forward or shift the direction of conversation. Kathy, the SAO, in a junior division TLCP often used this to bring meetings forward and set up the next phase of the work.

So you have to talk as a team about where we are going. Where are we thinking of going for the next term? Because this should be embedded... So what is that going to look like. In thinking of your term 3, what are some of the big pieces that you are thinking of doing and then let's see through that conversation where we can also find out what kind of resources we can find-the variety of texts that will help move through that because Judith (the litco/school librarian) is here. Right? [Kathy]

As is evident, Kathy is setting direction and influencing action. Facilitators and leaders were most likely to use transition dialogue as it required a degree of influence within the group and often set the pace and tone of the meeting. The meetings that were a part of this research were all facilitated by a designated leader, principal, literacy coach or SAO. As such, the transitions and pace within the meetings were driven by the leaders in the group but teachers certainly did respond to potential directions as well as help frame what direction the meeting would go. With teams that had been together for longer periods of time (up to a year), these moments seemed fluid and participatory. There was less clarification and discussion as to what the next step might be and why. Fluidity of transitions to actions within TLCP conversations might be an indicator of the strength of collaboration of the team.

#### d. Challenging the thinking within discussions

Challenges originated both from teachers and from leaders within these PLCs. Although this type of dialogue most often came from those in positions of authority e.g. Principals, SAOs and the superintendent, there were instances where teachers pushed the thinking. In one meeting, Terry, a grade 5 teacher, and Laney, a grade 6 teacher, were both pushing thinking forward, offering ideas to each other and working from agendas that they were setting for themselves.

I personally, because I haven't done one in my class, I'd like to do a literature circle. It's a challenge for me and I want that experience. Especially if I know my colleagues are doing literature circles, it's helpful to have their support but in terms of resources, that could be difficult. [Terry]

You could do the literature circles with-you could pick a menu and a few other things and have it focus on that for a week or two or a few days. You can focus on a specific piece for a certain amount of time. You could do a short story and then you could do something totally different. You could choose something totally different; I don't know directories or an informational text or something like that. [Laney]

This is an example of the work within a TLCP at its most rich in terms of a learning experience for teachers. Terry and Laney are setting the context for their own learning. They are challenging themselves against what they know or have done and using each other's knowledge and experience to frame potential actions that could lead to deeper understanding of their practice. In these instances, the positional leader becomes a sounding board; 'Have you thought of this?' 'How does that work with these students?' When challenge and risk taking, driven from classroom experiences and student work, become common ways in which teachers approach this work, the TLCP becomes a vehicle for a dynamic learning environment that is not *brought* to the teacher but is a part of the teacher's professional activity in teaching and learning in the classroom.

### *3. Potential benefits of TLCP for teacher professional learning*

The Teaching and Learning Critical Pathway process within this study supported teacher professional learning and development in five general areas.

- Use of data
- Connectivity and growth
- Openness and learning from each others experiences, styles and approaches
- Teacher ownership and risk taking
- Integration and spread of work

#### a. Use of data

The integration and use of formative and summative assessment throughout each pathway cycle allows opportunities for teachers to use a variety of different types of student data to evaluate effectiveness of instructional approaches and focus collaboratively. The relatively short cycles of the TLCP provide frequency of opportunities to develop skills of assessment. Equally, the connection between large summative assessments like the EQAO and the work of the TLCP across the year give teachers a sense of the connections between summative assessments and formative assessments which can be difficult to make in less structured or coordinated approaches to teacher professional activities. This integration of different types of data supports intentionality within the work of the TLCP. Kathy puts it this way:

We've gone through the EQAOs exemplars as well as their rubrics so that that language and what their expectation of a 3 (level 3) is something that we looked at, at one point. We've done that so when they (teachers) are having a conversation, it's not that we don't know what the rubrics and exemplars are out of EQAO. What is there rational for a 4, we've seen it. What does that look like in terms of the exemplars they gave? We've seen that. What does the rubric for the 4 look like, they've seen it. [Kathy]

Consolidating understanding of assessment levels which is grounded in classroom instruction and the EQAO data provides teachers with opportunities to work dynamically between assessment and instruction. Opportunities for teachers to collectively build more reliable approaches to their use of assessment arise or as Kathy sees it:

The conversation about our data is more reliable. It's not apples and oranges. We are trying to make it cleaner so we are talking about the same type of thinking between the pre and the post. [Kathy]

In teacher teams that have worked through a few of these cycles, perspectives on ways teachers looked at data shifted. The use of data became a tool owned by teachers that informed deeper learning opportunities rather than an activity that teachers did in order to map or apply numbers to students' learning. One principal, Mary, saw a lot of growth in this area of the work.

The way we have looked at the data changed each time. This is the first time that we are doing something pre and post that will not be canned from out there. It will not be DRA. It will be something that we created and the pre and the post will look similar. There is less guessing. There is still some of that 'well you know they got a two plus but I'm pretty sure that from the work I've seen they are more like a 3 minus. I think they are having an off day'. [Mary]

Ownership and development of formative assessment techniques may also help develop the connections between planning as a teacher activity-something a teacher will do in a classroom- to planning for student learning.

#### b. Connectivity and growth

As just stated, the relative shortness of the pathway cycle created a shorter-term feedback loop which allowed teachers to easily connect the data that they were collecting to the instructional strategies, resources and curriculum areas on which were focused. These

cycles had the additional advantage of creating an opportunity for teachers to immediately apply learning in a new cycle which created a structure in which teachers were able to apply understandings and misunderstanding directly to their classrooms within the next TLCP cycle. A grade 6 teacher, Laney, discusses this within her experiences.

The pathways are not separate entities. Each one is building on the previous one. So we are not forgetting what we did in the previous one. And that's what I mean by 'making sense' - each one is building from the previous one. We are bringing what we did in previous pathway to this pathway. [Laney]

In terms of teacher professional learning, this is a key component towards ongoing and deeper learning. Laney is applying her learning immediately and this application is generating new learning again. This learning will be disseminated in the collaborative meetings and reapplied to her classroom in a continuous pattern of progressive learning. The cycle's shortness and connectivity support this type of learning. As well, coupling her individual experiences with other teachers' experiences may help to form a collective understanding which further supports the openness and sharing within the PLC.

### c. Openness and learning from each other

It is well documented within research that openness, honesty and sharing are a key component of teacher collaboration (e.g. Darling-Hammond, 2002 or Earl and Katz, 2007). This is no different in the TLCP model where teachers for the most part seemed to honour the diversity and styles of other teachers while at the same time were providing feedback, asking questions and sharing experiences. Terry, a grade 5 teacher mentioned earlier, states:

... when I was speaking with Laney and the way she did a presentation format, I decided I was going to switch it over to that way ... the conversations, the discussions, the motivation, the seriousness that the students took it. It was their time to present. We had four conversations every Friday. They were bigger and better and just so much richer in understanding. So I started doing that and it's been amazing. It's really been amazing. I think that it's a great way to tag onto all those different expectations (curricular expectations). [Terry]

The individual progression of their own learning fuels the collective understanding of the team for use by anyone. Terry benefits from Laney's teaching strategies but equally because the work is collaborative and framed by curricular skill areas and student data, the experiences are shared and focussed experiences. So although there was great deal of diversity within the TLCP, there was also a common relationship of experience that seemed to promote learning. Terry goes on to discuss relationship building through common experiences:

We have a better understanding through these conversations. As a staff, we aren't stuck in our ways. We are really open. It's through the conversation. 'What are you doing? What are you doing?' We got to these points quite quickly compared to the beginning and it's because we are on board. We are all on the same path. We are individuals and do it in a different way but we are all working on the same pathway. That's definitely evolved. [Terry]

Terry believes that the collaborative process itself has helped bring trust and openness to the PLC that in turn has helped the team build intentionality within their conversations. She sees diversity as part of the pathway experience as opposed to something that needs to be sorted out. Interestingly, all these ideas seem to take time to evolve and emerge. Collaboration in teacher teams is also a skill that needs development within PLC processes.

#### d. Teacher Ownership and risk taking

A critical aspect of the TLCP process is the degree to which teachers begin to own the process. The teams that had more experience, worked more intentionally and more often, set their own challenges. The process was owned by them, for them. This also led to adaptation and active use of tools which other PLC teams were simply adopting. The curriculum, EQAO exemplars and rubrics as well as DRAs were all adapted and used to support their experiences within the pathway process. The diversity of approaches used in addressing any one area of the curriculum is a good example of this. Brian, a grade 8 teacher heard from earlier, put it this way:

I'm kind of a lousy team member. I'm kind of a little less give and little more take in terms of what they are doing in their classrooms. What's really great about this is the sharing and how we are doing that. It gives you spectrum for each expectation. There's different ways of meeting that expectation. I like that a lot. [Brian]

The 'spectrum' of approaches used by teachers within any one curricular area supports teachers in seeing many possibilities, adjust or take on wholly new approaches than they may have in isolation. Teachers adapt and use resources to fit their own approaches. This supports the development of ownership and efficacy within the change process. The more ownership the team has of the pathway the more risk they seem to be willing to take.

The degree to which PLCs were willing to take risks within this process was an indicator of the buy in and the depth of learning occurring. Terry is taking risks in her instructional approaches in ways that she feels may create deeper learning experiences for students.

This will be a great indicator of how they organize their thoughts. Whether the main idea comes out when we give them only one question. I am really interested,

for me, in how my students do it this time because I have been giving them opportunities to do the writing process; the rough copies, the jot notes and then how do you go from jot notes to rough copies and then editing and all that and putting it all in order. I think it is really good time to do this. [Terry]

The TLPC that Terry is part of is working on getting students to be able to synthesize their responses and move away from the scaffolding of a set of questions for students that acts as a synthesis tool for them. They were trying, as the principal put it, to get students to start giving 'one, big, open response' to a question without smaller prompts. Teachers taking the risk of trying new things that stretch their own professional skills and challenge their students are an important part of being successful in professional learning. The learning embedded within this process stems from student experiences within the classroom.

#### e. Integration and spread of work

Another area that continually emerged from the TLCs that had been running for more than a year was the degrees, to which work planned in the pathway for one project began to influence other areas of the teachers' work in the classroom. Teachers began to make links from one curriculum area to another as they learned more of what their students could or could not do. They began spin off projects in social studies that emerged from the work in literacy within the pathway. Non-fiction writing or graphic designs done in a science project might inform a history project. The intentionality of the teachers' work seemed to increase with the depth of collaboration that the teams were able to reach.

Laney shows a glimpse of this in a discussion around the evaluation of media.

I think it would be valuable to start to add some of those pieces and talking about the features, what makes it effective. We could have a subway telephone directory

map and just identify the features of it. 'Is it effective or ineffective? Is it easy to follow?' If you are a person trying to use the telephone system, could you use this to navigate through? [Laney]

As they worked through their own experiences, evaluated their students work or planned their next phases, ideas would, as Paula, the superintendent, put it, 'bubble up' and be pursued. They might come from one teacher and be taken on by another. There was spontaneity to this process that could not be pre-planned but rather emerged from work in the pathway. This finding suggests that a PLC structure which has similar components as the TLCP could be promising for professional learning and growth across a number of areas of instructional practice. Rather than be limited by a language focus, the starting point may lead to any number of different areas of student learning in the classroom that is informed from this process.

#### *4. Summary of The Teaching and Learning Critical Pathway*

The benefits of the TLCP were most readily apparent with school teams who had the time to do a number of pathway cycles who showed degrees of team initiative and collective desire to work together within the process. School teams across the network varied considerably in terms of their collaboration, risk taking, knowledge of assessment and ownership of the process in general. Respecting this diversity while also supporting or facilitating deeper collaborative and individual efforts of teachers in school teams within each pathway cycle may be instrumental to the success of this process for teacher professional learning. This suggests that skilled leadership and facilitation for teams just starting this process may be of critical importance. The TLCP requires teachers unfamiliar with this type of work to stretch in their understanding of curriculum, assessment and instructional practices at one time. Although, how TLCP process unfolds

is not prescribed, it could lend itself to a 'checklist approach' that may only engage teachers at a 'surface' or superficial level for teachers who, as detailed within the network section of this report, are passively resisting the work.

The Teaching and Learning Critical Pathway is a potentially effective way in which to model a professional learning community as it provides structures and processes through which teachers can collaborate. It also merges assessment, curriculum and instructional practice in ways that could be very helpful for professional learning of teachers in general. That said, it is not the only way to run a PLC.

What seems most relevant to work within PLCs can be summed up from this research, the LNS Research Team's previous research and many other researchers into a number of school team collaborative features. School team collaboration is effective in positively influencing student learning experiences when this work:

- is classroom *specific* and classroom *directed*
- is progressive from collective action and discussion to individual work and back again
- challenged teachers to use many sources of potential data and to link these data to practice collectively and individually
- is planned from previous work not added to existing work.

It should also be noted that the degrees to which students respond positively in terms of their own learning to the planned work, is indicative of increased buy in that teachers expressed. It seems that any PLC run carefully, well facilitated with these characteristics embedded in the work they did would have a good chance at having an influence on the professional learning of its team members.

## **V. Report Conclusions**

This particular teaching and learning network was a successful attempt at devolving a structured and supported professional learning process to the school site while incorporating the learning experiences of the individual school teams for collective use by all schools within the network. There was a great deal of variation across the school teams in terms of effectiveness, progression and learning of individual teachers but the network itself embraced this variation and used it to further build participation, buy in and collaboration amongst the teachers. In looking more closely at the processes occurring within the network and within the TLCP process in school teams, a number of important areas emerged that help in gaining a better understanding of the potential and the challenges of using a networked learning approach within school boards as follows.

In terms of school leadership, the most effective principals were both participants and facilitators of the team based work. This put pressure on their understanding of instruction, assessment and curriculum. They needed confidence in these areas in order to challenge teachers' pre-existing conceptions as well as allow for disagreement to increase the collective knowledge of the team. Their roles as principals allowed them the space to embrace these challenges more easily than a teacher might. They needed the ability to challenge the 'right and wrong' of instructional practice while still creating the inclusive teacher driven environment that this work requires. That is a difficult task for any school principal and arguably requires deep knowledge of instruction and assessment strategies. Through participation, principals were able to get a sense of what the teachers' strengths

and understandings were in areas of instruction, assessment, curriculum and learning which, in turn, helped inform their own work as school leaders.

Team discussion was constantly used within the TLCP collaborative processes. Team discussion served to validate work, experience and ideas of both leaders and teachers. Team dialogue played an important role in building group identities that helped individual risk taking and confidence. Team discussion helped build and consolidate thinking drawing from each individual's experiences to contribute to collective knowledge of the team and in certain instances, the entire network.

Seen holistically, this network is an exciting approach to board-school relations and school to school relations. It is an approach to school change and improvement efforts that privileges the individual's experience and uses this experience as a way to inform work across schools collectively. While this type of networked learning needs careful thought and support that can challenge the expertise of leadership at both the board and the school, it also offers some very exciting possibilities for community building amongst schools that helps build purpose and efficacy through individual and collective action and inquiry. All of which creates refinement of instructional practices for the purpose of improving student learning and achievement.

The network was successful in dealing with school and teacher resistance by inviting resistance and diversity directly into the process. When buy in occurred, it occurred as a result of inclusive participation. This stemmed from a firm belief structure which

honoured each teacher's individual experiences as a potentially valuable source of knowledge and direction for the entire network. This mirrors other research findings that highlight the importance of professional learning for teachers that directly stems from their work in the classroom. As Penuel et. al (2007) highlight, proximity and connectedness to the teachers daily experience is a necessary part of building teacher ownership of initiatives directed at school change and improvement. Additionally, Coburn (2004) argues that this type of ownership is a critical part effective district and jurisdictional reform.

This network's structure and processes emerged from existing school based support of LNS SAOs in four schools. This signals the importance of growing networks from the immediate successful experiences emerging from within the schools situated in the network as opposed to bringing a network to a group of schools without such relevant experiences. Put another way, successful existing practices within and amongst schools can serve as important catalysts to successful teaching and learning networks.

This network is driven by joint and common experiences across all 17 schools. Teachers had opportunities to compare understandings of learning and perceptions of student skills from a broader perspective than they could have by only working in their own school division or teams. The network provided teachers with the ability to access a much wider range of knowledge and experiences as a result of experiences shared through TLCP processes.

The work of the network was relevant to the work of each individual teacher. This is a point that is closely related to the issues of proximity just mentioned. Teachers experiencing the effects of their work done through the TLCP on their students served as an important part for teachers of buying into the network, the TLCP processes in general and their own learning especially. When students surprised them, teachers took notice and showed evidence of shifting their own perspectives.

The network allowed for teachers to develop, progress and adapt within their school teams at their own pace. Although challenge, support, patience and acceptance were also built into the network processes, failure, confusion and/or misunderstanding within one TLCP process led to greater individual and collective understanding and learning in the areas of curriculum, instruction and assessment. This, in turn, led to deeper, more intentional collective practice in the next cycle. The TLCP supported teacher learning by providing opportunities for teachers to apply and analyze their teaching practice individually as well as collectively.

Participation in the network and the TLCP was not mandatory but invited. Support was then positioned as a privilege of participation rather than location e.g. being a school in this family. In terms of pressure and hierarchies within both schools and the board, trust in the process as a means to build inter and intra accountability and urgency for change helped leaders create participatory cultures within their school teams that also seemed to support the growth in efficacy expressed by many teachers.

The network structures were able to capture diverse experiences and bring them to the collective knowledge to be used and adapted. Specifically, the literacy coaches were instrumental in doing this within each school they supported, their own PLC and the larger network sessions. Amongst other things, Litcos served as the communicative links for the network. They helped the network adapt to the experiences of teachers in schools. Having such support structures may be an important part of growing networked learning amongst schools. Literacy coaches and SAOs served as sounding boards through which teachers gained confidence to try new things and insights through which to see their own practice in different ways. This finding emphasizes the importance of external facilitation and support throughout the network, both at the school site and in the larger network sessions. These roles provide a link and a catalyst to change processes across the network.

As previously described, teaching and then readjusting in response to students served as the material from which professional learning and development occurred within the TLCP process. Buy in, professional learning and progression stemmed from participation and commitment. The network was driven from and often by the experiences of teachers going through TLCP cycles. When new ideas, techniques or resources were used, they were used in this context as opposed to being introduced independent of the lived experiences of teachers in their work.

## VI. References

- Ball, S. (1987). *The Micro-Politics of the School, Towards a theory of school organization*. London, Methuen & Co. Ltd.
- Ball, S. J. and Bowe, R. (1991). Micropolitics of Radical Change: Budgets, Management, and Control in British Schools. *The Politics of Life in Schools, Power, Conflict, and Cooperation*. Blase, J. London, Sage Publications.
- Bennitt, N. (2007) *Academic Rigour: Perspectives from the United Kingdom*, Canadian Society for Study in Education, University of Saskatchewan, May 27, 2007.
- Blase, J. and Anderson, G. (1995). *The Micropolitics of Educational Leadership, From Control to Empowerment*. London, Cassell.
- Britzman, D. P. (1989). "Who has the floor? Curriculum, Teaching and the English Student Teacher's Struggle for Voice." Curriculum Inquiry 19(2): 143-162.
- Cameron, D.H. (2005) *Teachers Working in Collaborative Structures: A Case Study of a Secondary School in the USA*, Educational Management Administration & Leadership, Vol. 33, No. 3, pp. 311-330
- Canadian Language and Learning Research Network (2007) *Evaluation Phase 1 The Impact of the Literacy and Numeracy Secretariat: Changes in Ontario's Education System*, June 29<sup>th</sup> 2007.
- Coburn, C. (2003). *Rethinking Scale: Moving Beyond Numbers to Deep and Lasting Change*, Educational Researcher, 32 (6): 3-12.
- Darling-Hammond, L. (2002) *Redesigning Schools: What Matters and What Works 10 Features of Good Small Schools*, Stanford, CA: School Redesign Network at Stanford University.
- Datnow, A., Hubbard, L. and Mehan, H., (1998) *Educational Reform Implementation: A Co-Constructed Process, Research Report 5*, The Center for Research on Education, Diversity & Excellence, Santa Cruz, CA and Washington, DC.
- DfEE (2001). *Key Stage 3 National Strategy Management guide: lessons from the pilot*.
- Dolan, L.J., Madden, N. A., Ross, S.M., Slavin, R. E. and Wasik, B. A. (1994) *Whenever and Wherever We Choose, the Replication of 'Success for All'*, Phi Delta Kappan, 75 (8) pp: 639-647.

- Earl, L., Levin, B., Leithwood, K., Fullan, M., Watson, N., Torrance, N., Jantzi, D., and Mascall, B. (2003). *Watching Learning 3: Executive Summary of Final Report of the External Evaluation of England's National Literacy and Numeracy Strategies*.
- Earl, L. and Katz, S. (2006) *How Networked Learning Communities Work*, Centre For Strategic Education, Seminar Series Paper No. 155.
- Fullan, M., Hill, P. and Crevola, C. (2006) *Breakthrough*, Sage Publications, London, UK.
- Frankham, J. (2006) *Networked utopias and alternative entanglements for educational research and practice*, *Journal of Education Policy*, 21(6) pp.661-677.
- Gitlin, A. and Margonis, F. (1995) *The Political Aspect of Reform: Teacher Resistance as Good Sense*. *American Journal of Education* 103(4) pp. 377-405.
- Hargreaves, A. (1991). *Contrived Collegiality: The Micropolitics of Teacher Collaboration*, *The Politics of Life in Schools, Power, Conflict, and Cooperation*. Blase, J. London, Sage Publications.
- Lieberman A. and McLaughlin W. (1992) *Networks for Educational Change: Powerful and Problematic*, *Phi Delta Kappan*, 73(9) pp. 673-677.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. London: Sage.
- Little, J. W. (1982). *Norms of Collegiality and Experimentation: Workplace Conditions of School Success*, *American Educational Research Journal* 19(3) pp. 325 - 340.
- Little, J. W. (1995). *Contested Ground: The Basis of Teacher Leadership in Two Restructuring High Schools*, *The Elementary School Journal* 96(1) pp. 47 - 63.
- Lofland, J., & Lofland, L. H. (1995). *Analyzing social settings* (Vol. 3rd ed.). Belmont, CA: Wadsworth.
- Ozga, J. and Lawn, M. (1988) *Schoolwork: Interpreting the Labour Process of Teaching*, *British Journal of Sociology of Education* 9(3): 323-336.
- Penuel, W. R., Fishman, B.J., Yamaguchi, R. and Gallagher, L. P. (2007) *What Makes Professional Development Effective? Strategies That Foster Curriculum Implementation*, *American Educational Research Journal*, 44(4) pp. 921-958.
- Radnor, H. A., Ball, S. , Vincent C. and Henshaw, L. (1996). *Local Education Authorities: Accountability and Control*. London, Trentham Books Ltd.

Reeves, D. (2007) Presentation to Literacy and Numeracy Secretariat, Parkway Sheraton, Markham, Ontario, May 29, 2007.

Sarason, S. B. (1990). *The Predictable Failure of Educational Reform*. San Francisco, Jossey Bass.

Weick, K. (1976) *Educational Organizations as Loosely Coupled Systems*, *Administrative Science Quarterly*, 21 pp. 1-19.

Woods, P. (1993) *Critical Events in Education*, *British Journal of Sociology of Education*, 14(4) pp. 355-371.