Report of the PLC Study Committee

**Building Professional Learning Communities
in Nova Scotia Schools**

May 2011

Table of Contents

Improvement is more a function of learning to do the right thing in the setting in which you work. The problem is that there is almost no opportunity for teachers to engage in continuous and substantial learning about their practice in the setting in which they actually work.

Richard Elmore, Harvard
The Six Secrets of Change, 2008

1.0   INTRODUCTION

Through the latter part of the past decade, educators and system leaders in Nova Scotia have been developing and implementing promising new practices that are shifting staff development to a more collaborative school-based approach. The recommendations contained in this report are intended to advance this work in a way that increases student achievement, and facilitates teacher learning and system improvement across the province in a deep and sustainable way.

System knowledge of the research on effective professional learning practices has grown significantly in Nova Scotia over the past decade. There is a clearer understanding of what it takes to truly improve student learning. This knowledge and understanding has been brought forward through key reports such as the report of the Education Professional Development Committee and the Minister's Working Committee on Absenteeism and Classroom Climate. This report builds on and supplements this work and specifically targets how to build capacity and time for effective teacher professional learning communities in Nova Scotia schools.

The term combines two basic concepts – *professional learning* and *community* – that are part of the discourse in teacher education, professional development, and educational policy in the early 21st century. It has become well understood that the instructional practices of the teacher are the most important factor in student achievement. In his meta-analyses of influences related to achievement, Dr. John Hattie ranks 138 factors that influence student achievement. Seven of the top ten factors are directly related to the quality of instruction, including teaching to the student's developmental level, providing formative evaluations, ensuring clarity, and providing meaningful feedback (Hattie, p.297). Teacher learning – how, when, what, and under what conditions teachers learn in order to respond to the needs of a changing society - is among the most important issues in educational policy and practice. The paradigm of job-embedded professional development is relatively new and focuses on continuous teacher learning over time within their classroom and school contexts. This paradigm recognizes that teachers are not just receivers of external and expert information, or people who simply implement the curriculum; they translate and interpret subject matter, they design a range of teaching strategies, and they generate new knowledge and create meaning for themselves and their students everyday. Teachers are responsible for finding ways to implement the curriculum and adjust their instructional practices to ensure students learn within a variety of learning environments. This work is much too complex to do in isolation.

The 21st century concept of teacher learning replaces earlier notions of 'teacher training' as a one-time process prior to the beginning of the teaching career wherein undergraduates were equipped with content, methods in subject areas, information about educational theories, and then sent out to 'practice' teaching. It also replaces the idea of periodic professional development where teachers come together to receive the latest information about effective teaching tools and techniques from various educational experts, typically removed from the

present classroom challenges.

It is now understood that successful teacher learning must occur over time as close to the classroom as possible rather than in isolated moments in time. It also means that teacher learning occurs continuously over their entire professional life span. As highlighted in the quote from Richard Elmore in the beginning of this report, teacher learning is most effective when linked to student learning that is embedded in the daily life of schools. Ann Lieberman and Lynn Miller, leading experts in this field, refer to the new paradigm as 'culture-building', not skills training.

This report seeks to define the processes, roles and responsibilities, and partner collaboration that are needed to advance our ongoing effort to create authentic professional learning communities across all Nova Scotia schools.

1.1 Background

The work of the Education Professional Development Committee in its report of September 2009 provides a detailed description of professional learning communities (PLCs) as a critical process for teacher learning and collaboration, designed specifically to enhance instruction and the quality of education for each student. In its response to this report, the Department of Education agreed that the report presented a compelling case for moving forward and provided sound principles and standards to guide professional learning in the Nova Scotia public education system. It further supported a clear focus on building our capacity in three key areas: instructional leadership, mentoring and coaching, and PLCs. The third direction is the primary subject of this report:

"To develop the capacity, knowledge, and skills of teachers, principals, and schools to implement effective practices in professional learning"

We believe that the creation of effective professional learning communities in Nova Scotia is the most powerful process to accomplish this end.

Building on the findings of the Education Professional Development Committee, system leaders from the Nova Scotia school boards, the Nova Scotia School Boards Association, the Nova Scotia Teachers Union, and the Department of Education began a conversation in February 2010 on how best to create time and capacity for ongoing and job-embedded teacher professional learning in every school.

System leaders discussed the importance of capacity building and structuring time for teachers to engage in ongoing and deep reflection about student learning and teaching practices. This means fundamentally changing the professional and cultural norms of teachers, moving away from practicing alone in their classrooms to participating in collaborative learning teams.

Leaders highlighted the call from teachers for regularly scheduled collaborative time embedded in their daily work, acknowledging teacher concerns over their demanding workload and the stress that is created by the system continually adding on new teacher responsibilities. Participants in the February dialogue shared their experiences and concerns related to how we move forward, but felt PLCs were the critical piece to improve student learning and to support deep and sustainable change. The leadership group agreed to support the establishment of a small design group to develop recommendations on a three-year plan to build capacity and time for teacher reflection. They also directed two additional pieces of work to be undertaken:

> 1. learn from those schools who have found creative ways to embed collaborative time in their daily work, and
> 2. examine processes outside of classroom teaching that are not highly impacting the quality of teaching and learning with the goal of eliminating or reducing processes to provide more time for reflection.

The reports from these two pieces of work were reviewed by the PLC Study Committee during its deliberations.

1.2   Establishment of the Design Group and PLC Study Committee

A Design Group met several times between March and June 2010 to determine how best to build time and capacity for teacher professional learning. It became clear that partners needed to construct a collective view of how to move forward. Key questions needed to be considered such as:

> • What is a professional learning community and how do people behave in a PLC?
> • What are the roles and responsibilities of the key people involved and what kinds of skills do they need to carry out these roles?
> • What does leadership look like and where does it come from in this approach?
> • What does accountability look like and how do we avoid typical pitfalls?
> • What are the key implementation challenges and how do we collectively overcome them?
> • How do we work together most effectively to sustain learning communities over time?
> • What are the positive behaviours and practices across the system that best support this vision of professional learning in our schools?

Considering many schools in Nova Scotia are involved in PLC practices today, we need to learn from our successes and challenges and create a clear and common understanding of the practices that will propel Nova Scotia forward. With support from the Minister of Education, the Design Group develop a small PLC Study Committee to help define a clear and collective vision for school-based PLCs that are embedded in a system-supported collaborative learning culture. While developing this shared knowledge, the PLC Study Committee was asked to bring

forward recommendations to address critical and challenging questions such as how do we create time for teachers to reflect on their practice together, and what is the right balance between giving direction to schools and allowing a level of autonomy.

The PLC Study Committee included representatives from all eight school boards, ensuring strong voices from the various roles in the system, the Nova Scotia Teachers Union, the Nova Scotia School Boards Association, university Schools of Education, and the Department of Education. The members are listed in Appendix A.

The PLC Study Committee met five times between August and December 2010 and are pleased to provide this report to the Minister of Education and to the Design Group for their consideration and action. This report builds on the recognition that "*all professions must have time and space in their practice to learn from their experiences, learn about new research, and collaborate on how to implement new approaches effectively*".

Today, almost all jurisdictions in Canada and in OECD countries are having similar conversations about how to effectively change the way we think about the work of teaching and the way professional learning is structured and supported. They are also struggling with how to find or structure the time needed to allow for meaningful teacher collaboration and reflection. All educational systems in OECD countries are also trying to find new and creative ways to build capacity, leadership and skills to support teacher learning and development.

The recommendations contained within this report comprise a made-in-Nova Scotia strategy that is based on current knowledge about the most successful education systems in the world recognized for significantly increasing student achievement or maintaining a high standard of student achievement over time. These outstanding educational systems have found ways and time for teachers to consistently learn and collaborate within their work days. Many are also using PLC structures to stimulate changes in school culture and broader systemic change.

The recommendations in this report frame a promising blueprint for a successful path forward.

2.0   VISION FOR TEACHER PROFESSIONAL LEARNING

The PLC Study Committee began its work with a review of the report of the Education Professional Development Committee and the Department of Education Response to this report. The frontispiece of this report is the Vision for Teacher Professional Learning adopted from these reports:

> The *Vision for Teacher Professional Learning* is where
> • all teachers are engaged in collaborative professional learning;
> • effective use of student data is central to informing teachers' professional practice and individual learning goals;
> • the essential curriculum is well-defined and understood across the system, and the curriculum outcomes are addressed in all classrooms;
> • a variety of classroom-based assessment practices provide current and reliable student data for learning and of learning;
> • teachers are engaged in talking about teaching and learning with a shared sense of purpose;
> • the principal provides critical instructional leadership in a supportive environment; and,
> • school boards and the department provide strong, systematic, and differentiated support for schools depending on school improvement goals and the learning needs of the teachers and students.

Within this cultural shift toward job-embedded learning, PLCs provide powerful processes to strengthen not only teachers' own effectiveness, but also to support the profession's collective responsibility for the academic achievement of all students. The EPDC Report stresses that "*This professional learning communities approach is characterized by a learning culture in which all partners think and act collaboratively. Teachers who are working as part of professional learning communities are supported as they reflect, study data, observe each other teach, and share with colleagues as a regular part of their ongoing practice to collectively enhance student achievement.*"

3.0   TRUE PROFESSIONAL LEARNING COMMUNITY

It has become commonplace to refer to certain projects, programs, networks, and collaborations among teachers as professional learning communities. This term is more often than not misused to depict any group effort toward a common goal. This section serves to create an understanding of the nature of community, common elements that exist in the creation of community and the benefits of creating community in schools.

3.1   The Nature of Community

Like many other concepts, "community" is used in everyday speech as if its meaning is universally understood and as if its existence is everywhere. We frequently refer to the physical places where we live as communities and we invoke the term in many of our institutional settings to suggest a sense of family and togetherness. However the term is used it invariably implies something good and desirable. Yet, there is nothing about the places where we live that necessarily makes them communities, and many, if not most, of our institutional settings are anything but communities.

The German concepts of gesellschaft and gemeinschaft are commonly used to differentiate authentic communities from their opposites. Gesellschaft translates as "society" or "company" and gemeinschaft as "community." Society is meant to denote a formal organizational arrangement, where internal relationships are built around specified tasks, procedures, and institutional goals, and where individuals have defined roles and responsibilities. Community, on the other hand, is built around informal relationships, shared values, and a sense of desired, as opposed to required, togetherness. Those who live in authentic community feel an obligation to each other and a connection to one another (an "I've-got-your-back" sense of connection). There is also commonly a deep feeling of belonging to something special with others who share like values and a common purpose.

Positioning these concepts as forming the endpoints of a continuum moves us away from seeing them as dichotomous – as either present or not – and towards an understanding that community can be present in varying degrees in many settings, including formal organizations like schools. However, the general principle that serves as a pivot on the continuum is formalization. That is, as we increasingly formalize the relationships between and among people, we move away from a sense of community towards more official or prescribed institutional roles and relationships.

3.2   Ubunto

These notions of community are closely aligned with the South African concept of *ubunto (oo-bun-too)*. Ubuntu is the African philosophy of humanism, linking the individual to the collective, building on the importance of belonging and interdependence. It is borne out of the

philosophy that community strength comes of community support, and that dignity and identity are achieved through mutualism, empathy and community commitment. The adage that 'it takes a village to raise a child' is aligned with the spirit and intent of ubuntu.

As Archbishop Desmond Tutu explains (1999), "it speaks of the very essence of being human. It is not, "I think therefore I am." It says rather: "I am human because I belong. I participate, I share."

A person with Ubuntu is open and available to others, values moral and social harmony, does not feel threatened by the success or abilities of others, and is diminished when others are humiliated, hurt, or treated as if they were less than who they are. A person with Ubuntu is willing to share, willing to be vulnerable, affirming of others, and have a self-assurance that comes from knowing that they belong in a greater whole. Ubuntu does not discount the importance of the individual but it recognizes that belonging gives meaning and resilience, enabling people to survive and thrive in the face of adversity.

The philosophy of ubunto could be extended to a professional learning community which embodies the primary values of:
- humanness (warmth, tolerance, understanding, and respect)
- caring (empathy, kindness, helpfulness, and friendliness).
- sharing (giving unconditionally, altruism, and redistribution)
- compassion (cohesion, forgiving, and spontaneity)

Humanness, caring, sharing and compassion are fundamental to effective teaching and learning practice, and they are critical in building strong community.

Ubuntu is a useful tool for building a teaching and learning community. It provides a vision and framework for respectful engagement, one that encourages reflection, reciprocity, community connectedness, and cross-cultural understanding. It supports communities of learners to construct meaning together, to create identities and new knowledge. It is a philosophy or set of ethical principles that captures the belief system that people in the community take responsibility for other members of the community.

You cannot build a cohesive school community without first building a community among the teachers on the foundations of ubuntu.

3.3   Common Barriers to Community

While formal institutions can have communities within, certain conditions work against their creation. As mentioned previously, formal role prescriptions, as defined by contractual arrangements, bring people together out of requirement, not desire. Stated differently, requiring people to work in close proximity or to collaborate to achieve organizational goals is not likely to result in the creation of a sense of community.

Size is also a consideration. It is much more difficult, though not impossible, to create community in large organizations or in physical places where there are lots of people. In principle, smaller is better. Smaller schools are more likely to develop a sense of community than large ones. Large schools can certainly have communities within, but the whole entity is less likely to feel a sense of community.

A third barrier relates to the second. It is harder to maintain a sense of community in cases where individuals have minimal ongoing contact. All formal organizations and communities are enactments, that is, they rely for their ongoing existence on their members playing out their roles on an everyday or regular basis. Formal organizations do this by prescribing the roles and responsibilities of members, making ongoing contact among members unnecessary, other than where working together is required to achieve institutional goals. Communities, however, as informal arrangements, require regular contact to maintain their existence. As contact wanes, individuals may feel a decreasing sense of belonging.

A final barrier to community is the presence of structures for rewarding individuals for their contributions, mostly external. In formal organizations there are rewards and punishments, however named or masked. These take multiple forms, such as salary increases or not, position advancement or not, good performance reports or not, praise or criticism, and continued employment or position loss. Each of these can serve as a factor in role performance. The rewards of community tend to be internal rather than external. The sense of common purpose, of responsibility for each other, and of achieving something that is morally good, all serve to unite people in community.

3.4 The Benefits of Creating Community in Schools

Schools are human service organizations. Everyone within has a formal contractual arrangement to provide a specified service. Some roles, such as those of teachers, are less prescribed than others, but all are formal institutional arrangements. There is nothing about these institutions that will necessarily create community. Even if everyone within understands their common goal to be the education of children and youth, that can be accomplished to varying degrees through the established formal arrangements.

The creation of community in school derives from the existence of the informal arrangements described previously, such as a sense of duty and common purpose. It results when members feel a deep sense of responsibility, as opposed to accountability, for their actions. It forms when people like each other, where the desire to work together is real, not contrived, and where the sense of achieving a higher good is front and centre. Why, then, is this more desirable than more formal school relationships?

Schools exist for children and youth. The responsibility for their learning and growth places schools in a realm shared by few other cultural institutions. Yet schools have long been plagued

by structural arrangements that do not necessarily support their growth and success. There is currently general agreement that teacher collaborative arrangements are more likely to result in enriched learning environments for students than previous structural arrangements that saw teachers working in relative isolation. However, creating authentic collaboration is challenging in an organization that for most of its history has been structured to provide teacher autonomy.

Creating the circumstances for teachers to collaborate is no guarantee that they will. More often than not, this results in what leading researcher, Andy Hargreaves, described as contrived collegiality. However, when teachers come together of their own volition to work together, not out of mandate but out of common purpose, the results can be spectacular. This desire to work together to achieve common goals is a step towards the community end of the continuum. In some Nova Scotia schools, teachers have already created this sense of community and are actively working together for the benefit of students.

Developing community in all schools is a very different matter. This is a situation where likely all that can be done is to create the circumstances for educators to work together and do everything possible to avoid the pitfalls. Attempts to formalize teacher collaboration are likely to fail. Building in rewards and punishments is a recipe for disaster. Tying community performance to unrealistic measures of success creates a pressure, rather than a desire, for performance. Requiring collaboration among large numbers of teachers will fall flat. Communities will decide their own size. They will achieve because of their internal desire for success. They will survive as long as members feel a need and desire to work together.

The desire for community is innately human, but the challenges of creating community have increased exponentially as a result of contemporary living and working arrangements. Creating communities is schools is an opportunity that will not only benefit teachers and students, but by their very existence they will model ways of being together that are, in and of themselves, educative.

4.0   THE COMPELLING CASE FOR CHANGE

Our students in Nova Scotia need to graduate from a school system that is recognized as one of the top performing systems in the world. Our high school graduates are competing with students from around the world when it comes to entering the workforce and qualifying for university, college, and other post-secondary institutions. The world is changing dramatically (fast paced, high-tech, highly competitive on a global basis) and our school system must ensure that our students have the knowledge and skills they need. This means creating a school system where students are achieving at very high levels. This means creating a school system where character development and learning social responsibility are priorities and where all students have the opportunity to develop their social, emotional and physical abilities. It means creating a school system where the achievements of our students compare favourably with the highest standards in our country and the highest standards of the top performing school systems in the world.

The core challenge before us is how to move our system from good to great. Good is not good enough for students in the 21st century. We have already started on this journey in Nova Scotia. Many innovative programs, curriculum changes and school improvement initiatives have been implemented over the past five to ten years. We have achieved gains in our math and literacy results, schools are more data-driven, staff are developing and implementing school improvement plans, and teachers are working increasingly more often in teams to improve student learning. However we need to ensure that we keep the momentum going and that we strengthen our commitment to achieve deep and far reaching improvements that will truly benefit our students.

To increase student achievement there are clear paths we need to follow. We know what makes the greatest difference for student achievement. We know what the best schools and systems in the world do to accomplish outstanding results. We simply need to have the courage to focus our energies and resources in taking action on what we already know.

The most significant factor influencing student achievement is the quality of teaching. It is not the only factor, but it is by far the most important factor. Teaching quality is improved by the continuous professional learning that teachers have the opportunity to engage in on a daily basis. Therefore, if we ever hope to create a high performing school system, we must provide all teachers with ongoing, timely, relevant and helpful professional learning.

We know teachers improve their ability to teach when they observe one another teaching, when they receive regular feedback on their teaching, when they engage with colleagues in discussions about teaching and learning, and when they work in teams on the job to problem solve, share strategies and work together to implement these strategies in their classrooms. This learning-centred and collaborative approach is not the experience of most schools today; however, it is the experience of great schools and it is the destination of our change journey.

One of the major challenges in creating great schools is to eliminate teacher isolation. Teacher isolation is the enemy of improvement and a major barrier to increasing student achievement. Teachers are expected to teach alone, behind closed doors, to implement complex changes in their classrooms, often without adequate support, and in many classrooms to improve their teaching practices on their own. This is an obsolete and ineffective approach to instructional improvement and the primary reason why many promising practices have stopped at the classroom door.

Each of us can recall from our experience in school those exceptional teachers who had a deep and lasting impact on your life as a student. These excellent teachers had the ability to motivate and inspire us and they embodied a powerful passion for teaching and learning. These great teachers held high expectations for us, they expected us to give our best and we did. They had the ability to fascinate with their imaginations and knowledge and a way of teaching us when we were discouraged or defeated. We succeeded in their classrooms because they were great teachers – masters of their profession. Unfortunately these exceptional teachers also worked in isolation behind their classroom doors where other teachers could not learn from them.

Our goal is to open these classroom doors and to create great teachers in every classroom in Nova Scotia. To accomplish this end we need to develop schools where isolation disappears, where teamwork is the norm, where expectations and standards are high, and where learning everyday from one another is the typical experience of teachers.

This kind of fundamental change in our thinking and our behaviour related to teaching and how teachers learn most effectively has significant implications for how we provide high quality learning opportunities for teachers. Schools, school boards, universities, the Nova Scotia Teachers Union, and the Department of Education need to work together in order for this system-wide change to be successful. Parents, families, students, community members and business leaders also need to be involved in guiding and supporting the fundamental and far reaching reforms we need to implement across the province.

To build support and champion these reforms throughout Nova Scotia, it is recommended that the following benefits of PLCs be communicated and promoted:

• PLCs will help raise student achievement levels across the province.

• PLCs contribute to the growth of our teachers as professionals; research shows that job-embedded professional development is the best way to improve instructional practices.

• We will have more high school graduates going on to post secondary education. This means a better educated workforce, which leads to economic growth and a deeper tax base.

• We will close the achievement gap that is connected to sex, gender, race/ethnicity and socio-economic status. It will also create more of a safety net for students who are struggling with the curriculum.

Our communications strategy must highlight key messages that speak to undeniable and compelling statistics to support our change efforts. We must find ways to create a sense of urgency to change especially for all those invested in maintaining the status-quo or those who do not see value or the need for making change. We must also take a hard and honest look at our student achievement statistics, and compare ourselves to other provinces and developed countries. Rather than being defensive, look on it as a challenge. We can "work smarter" and we can "do better."

We need to recognize that the work of educators is much more complex today. It is more demanding to provide a relevant education within our traditional structures for the 21st century student. We must also face the financial realities of the province and "stop doing" initiatives, activities and programs that require time, resources and energy that are in short supply. The PLC approach is a continuation of what we have been doing in school improvement and professional development for the past five to ten years. It is a natural evolution in our profession. It is not an 'add-on' or a disconnected and separate set of activities.

We will only meet with strong success if all partners support the direction together. We believe PLCs and job-embedded learning are the most promising approach for improving student learning. We need to engage parents, families, school advisory councils, communities, business, and political leaders in these conversations to build their support and address their concerns.

This provincial blueprint is a beginning, not a final product or plan. Our true destination will be achieved through the ongoing and authentic engagement of all stakeholders who will shape our unique version of PLCs together.

5.0   NOVA SCOTIA APPROACH TO PROFESSIONAL LEARNING COMMUNITIES

5.1   Definition and Components

Building on the vision for teacher professional learning in Nova Scotia, the PLC Study Committee recommends the adoption of the following definition to clearly establish our beliefs about the purpose and outcomes of an effective professional learning community:

> "A Professional Learning Community is a group of professional educators working together on evidence based collaborative teams in a climate of trust, innovation, risk taking, and reflection to enhance their practices so that all students are successful in learning essential curriculum outcomes."

It is recommended that the four critical components comprising the Nova Scotia approach to PLCs include:
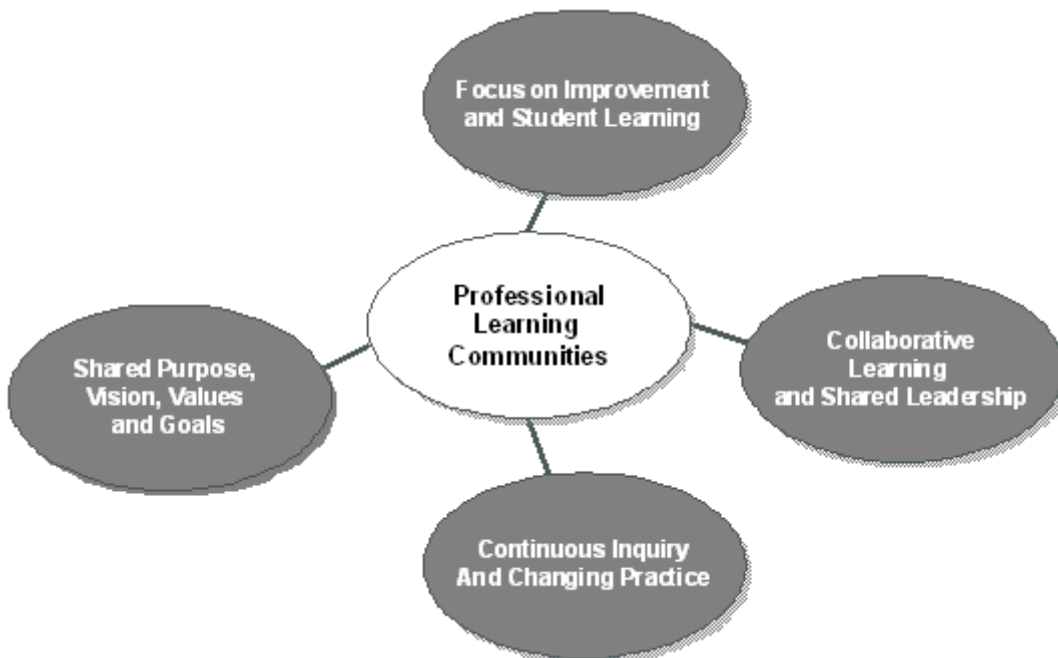
Focus on Improvement in Student Learning: The work within a PLC collaborative teams must have a direct impact on increasing student learning. This means also asking and answering three critical questions:
- what do we expect students to learn?
- how do we know they learned it?
- what do we do when they have not learned the curriculum outcomes?

Within a PLC there is a clear focus on results and teachers and administrators engage in ongoing conversations about the individual and collective progress of students.

Collaborative Learning and Shared Leadership: Within a PLC, teachers and principals have opportunities for team learning and shared leadership. Collaborative learning means learning together about best and promising practices in curriculum implementation, instruction and assessment. Shared leadership means people are engaged in democratic practices that help shape the decision making within the school community. It also means that leadership is a collective responsibility and a commitment to work together for all students in a school.

Continuous Inquiry and Changing Practices: In a PLC, school-based collaborative teams are engaged in continuous improvement cycles where teachers and administrators collectively examine student data and student work and develop strategies to respond to evolving student learning needs. It means asking hard questions and having professional discussions about why results are not being achieved. It also means celebrating achievements. Ultimately collaborative PLC teams are intended to support teachers as they improve their instructional practices.

Shared Purpose, Vision, Values and Goals: To achieve a shared purpose members of a PLC create and are guided by a vision of success, beliefs, and principles. In a PLC, members have a clear focus on achieving learning goals for students, and on creating an engaging and positive learning environment in the school. This foundation also articulates how the learning community will work together to achieve these ends.

We understand that as we engage in dialogue and discussion with many stakeholders over the next two to three years this definition and these components will likely change.

5.2   Promoting Professional Learning Community Practices

During the Committee's discussions we reached agreement on what we consider to be promising practices. Once again, we expect that this will change as we engage in dialogue and learn from our experiences.

• Developing common assessments (both summative and formative), as well as student self-assessments.
• Analyzing student achievement data and student work in teams, and conducting action research (including analyzing student and parent surveys) to improve/enhance instruction.
• Classroom observations focused on observing promising teaching practices.
• Curriculum mapping.
• Developing lesson plans / unit plans and pyramids of interventions to ensure that supports are in place to promote student success.

• Backward design for instructional improvement.
• Self-directed study groups.

5.3   No One Single Model for Effective PLCs

It takes time for members to build an effective PLC where there is interpersonal trust, where new ideas can develop, and where members feel comfortable raising sensitive issues. Over time, many communities that support teacher learning develop their own ways of working together. They develop their own ways of structuring conversations, discussing, debating and thinking about teaching and learning. This kind of development process must be allowed to emerge. It cannot be mandated. As trust and school culture develop, PLCs begin to engage in jointly constructing a common knowledge base. Teachers begin to talk about teaching and learning in a way that makes their tacit knowledge more visible. They question assumptions about teaching practice, and together teachers examine school and student data and information to generate new ideas and hypotheses about student learning. These teacher learning teams then begin to use a wide range of student work, school artifacts, action research and professional literature in their work together.

Teacher learning within communities is fundamentally a social and constructive activity. It is important to recognize that trust emerges in various ways in a PLC as groups of teachers engage in their work. Not all PLC conversations will immediately focus on jointly constructing knowledge about teaching and learning. Trust emerges as teachers share their classroom experiences, swap ideas, seek one another's advice, and exchange opinions about issues and problems in their schools. These regular and ongoing conversations help to create and sustain the interpersonal relationships and are necessary to achieve the higher collective purpose of their PLC.

The fundamental goals of a PLC are to facilitate improvement or change in professional practice and school cultures in order to enhance student learning activities, to increase achievement and to expand students' life opportunities. Members of a PLC will have different perspectives on what it means to enhance student learning and what it will take to get there. As a result the focus of different PLCs will vary considerably. We believe from studying the research that PLCs are most effective and sustainable when teachers choose how they will participate and how the PLC will operate. This requires a high level of trust and differentiated support and responsiveness from principals, school boards and the Department.

Educators will approach the relationships between knowledge and practice differently depending on their goals and shared philosophies. Some may focus on building "knowledge-*for*-practice," where it is presumed that knowing more (subject matter, educational theory, pedagogy, instructional strategies, etc.) leads to more effective practice. These PLCs may seek more support for content area expertise or instructional coaches.

Other PLCs may work toward building "knowledge-*in*-practice," where members focus on the practical knowledge or the art of teaching and may seek to engage more in facilitated conversations to share teacher experiences and new knowledge.

The third approach is "knowledge-*of*-practice," where members use their own classrooms for action research and use the PLC conversation to go deeper in their understanding and develop local knowledge, to make judgments, theorize practice, and connect their efforts to larger efforts. These PLCs may seek opportunities to network more across PLCs and schools to expand their learning.

Although at the highest level, PLCs share the goal of enhancing student learning and the school culture, they may not share the same ideas about the ultimate purpose of teaching and educational change. For example, some PLCs may choose to target their efforts on aspects of social change and social justice, others may target the school learning environment and student engagement, while others focus on cross-curricular implementation.

There is a delicate balance between understanding that effective PLCs need to chart their own course, and maintaining an appropriate level of leadership. The principal's role in supporting productive dialogue includes ensuring that some PLC conversations do not seek to undermine the emerging culture of collaboration, change the level of teacher responsibility for student learning, or seek to adjust the norms of teacher evaluation.

Teacher learning communities represent a major cultural shift. Many have acknowledged there is great potential for promoting continuous learning in the teaching profession and changing the way we view the work of teaching and learning. Realizing this promising future depends greatly on the willingness of teachers to engage authentically with each other in dialogue about teaching and learning. It also depends on vertical and horizontal teamwork at all levels of the educational system to reconceptualize teaching as both instruction and learning in a way that builds trust, capacity and energy.

5.4   Roles and Responsibilities

The PLC Study Committee spent considerable time discussing the key roles and responsibilities in the system to support the evolution and sustainability of professional learning communities in Nova Scotia schools. The following section pulls the key roles and responsibilities from the Innovation Configuration maps in the EPDC report (as adapted from the work of Shirley Hord and the National Staff Development Council) that the Study Committee felt were most relevant and targeted to support this work. It includes descriptions for those most directly involved in ensuring the success of PLCs (teachers, principals, and school board staff) as well as key partners who have a distinct role in supporting effective PLCs (Department of Education, Nova Scotia Teachers Union, elected school boards, and universities with Schools of Education.)

In an effective professional learning community approach, *TEACHERS*:

> • meet regularly with colleagues during the school day to collaboratively plan instruction and assessment
> • use a wide range of strategies to ensure success for all students, and monitor and revise school and classroom improvement strategies
> • use a variety of formal and embedded informal assessments to monitor student progress
> • collect and analyze a variety of data continuously throughout the year to determine learning needs of students and teachers, and to align professional learning with improvement goals
> • implement new classroom practice as a result of support that takes a variety of forms, including coaching, mentoring, co-teaching, and student achievement data
> • serve in a variety of instructional leadership roles
> • contribute to the planning of PLC and school-based professional learning opportunities
> • engage in learning structures like collaborative lesson design, lesson study, common assessments, analyzing student work, and problem-solving sessions
> • work with colleagues and administrators to study educational research, and discuss how to use this research in practice
> • use effective group process skills and conflict management to support collegial interactions
> • articulate the benefits of PLCs for students and parents
> • accept responsibility for the learning of all students

In an effective professional learning community approach, *PRINCIPALS*:

> • build a school culture that is characterized by collective responsibility for student learning, high expectations for supporting the learning of struggling students by changing practice, and promotes ongoing team learning and continuous improvement
> • advocate for and allocate resources to maintain professional learning communities, enabling teachers and staff to meet within the school day
> • using a variety of structures and resources so that teachers can engage collaboratively in learning communities focused on student achievement
> • model and lead teachers in working successfully with their colleagues and provide training on collaborative decision making and conflict resolution
> • create an environment of trust, respect and risk taking to encourage the implementation of innovative strategies
> • create experiences for teachers to serve as instructional leaders within the school and across networked learning communities, and coach internal leaders to support individuals as they work in a PLC
> • assist staff in planning high-quality professional learning focused on continuous improvement around effective teaching and instructional design

• work with teachers to analyze a variety of student achievement data to support PLC work, and to monitor learning goals of students and staff as well as school improvement goals
• conduct assessments of school-based PLCs and use the results to improve the quality of the PLC work and to identify the impact on teacher practice and student learning
• read and interpret educational research and create opportunities for teachers to read and use educational research in their practice, and to make school-wide instructional decisions
• advocate for a small number of high-priority goals designed to improve student learning and instructional practice

In an effective professional learning community approach, *SCHOOL BOARD STAFF*:
• engage in research and learning processes to support staff-wide knowledge and understanding of what effective PLCs look like and do in the context of adult learning principles
• empower schools to make decisions and support schools in achieving their improvement goals
• allocate resources to maintain professional learning communities that enable school-based staff to regularly meet within the school day
• prepare administrators and teachers to be skillful members of PLC learning teams
• provide professional learning experiences to enable principals to function as instructional leaders
• develop teachers to serve as instructional leaders, coaches/mentors in schools and across the region
• actively solicit teacher and administrator concerns and feelings and design professional learning to address and resolve concerns associated with PLC work
• support schools in learning how to collect and use data for PLC work
• support schools in delivering and analyzing assessments, assist in turning data into useful information for teachers, and support schools in using data and assessment results effectively
• act as a clearinghouse of research-based programs and research-based best practices
• provide online and e-learning technology for teachers to work in learning networks
• participate in provincial dialogues to facilitate learning and ideas across schools, school boards, and the department
• model PLC practices at the board level
• engage in conversations with schools about lower priority activities and consider removing non-essentials from required activities to balance expectations for schools
• recognize and support excellence in teaching, and celebrate PLC success

In an effective professional learning community approach, the *DEPARTMENT OF EDUCATION*:

- creates policies that provide for structures and funding for schools to operate as learning communities
- collaboratively plans with boards to support the provision of high-quality professional development around professional learning communities, based on research and best practices
- supports central office staff to use data effectively to shape and implement responsive professional learning
- analyses disaggregated provincial data around student achievement and other student data
- adopts a leadership role in creating, collating, and distributing research on best practices around instruction and assessment that have an impact on student achievement
- establishes structures and partnerships with universities, the Nova Scotia Educational Leadership Consortium, and school boards to initiate in-province educational research and disseminate case studies carried out in Nova Scotia
- creates and supports provincial e-learning networks and develops user-friendly on-line resources to support PLCs
- ensures that school boards have the capacity to create structures for PLC learning
- works with a range of provincial agencies to develop policies and programs that support parental and community involvement
- provides leadership to facilitate an ongoing dialogue and learning across schools and school boards
- continues supporting the collaboration among partners to develop a common understanding of the PLC approach and the joint work of PLCs

In an effective professional learning community approach, the *NOVA SCOTIA TEACHERS UNION*:

- actively promotes, values and supports teacher engagement in the professional learning community approach through dialogue, networking, organizational publications, conferences and professional learning sessions
- engages as a full key partner throughout the development of the professional learning community approach
- celebrates PLC successes and effective practices
- represents teachers to fairly 'negotiate' time
- recognizes and emphasizes the importance of professional learning within a PLC framework
- provides leadership to encourage funding availability for teachers to support teacher-initiated PLC work, including use of TPA Article 60 funds that would support inter-school learning community connections
- engages in active research initiatives

In an effective professional learning community approach, *ELECTED SCHOOL BOARDS*:
- create policies and structures that support ongoing job-embedded professional learning communities and networking across site-based learning communities
- assist schools in developing the infrastructure and environment to support PLC work
- allocate resources to maintain professional learning communities that enable school-based staff to regularly meet within the school day
- access support from and liaise with partners in education
- actively solicit teacher and administrator concerns and feelings and design professional learning to address and resolve concerns associated with PLC work
- participate in provincial dialogues to facilitate learning and ideas across school boards, the department and other partners
- stay informed about restrictions, obstacles, road blocks, and resource needs to support PLC work
- communicate and advocate for PLCs to members of their school board community and the general public, including parents, school advisory councils, home and school associations and the media
- recognize and support excellence in teaching, and celebrate PLC success

In an effective professional learning community approach, the *UNIVERSITY SCHOOLS OF EDUCATION*:
- understand new professional modes and norms in public education (as a central component in how schools operate) and understand its implications within a professional teacher preparation program
- ensure a level of readiness and knowledge about PLCs among all Bachelor of Education graduates and ensure effective use and debriefing of practicum experiences
- serve as a critical voice and ask key questions to support inquiry, such as "*why are we doing this*?", "*who benefits from it* ?"
- support knowledge building and competencies in practice
- consider the implications for Master's level programming in Education and make changes to ensure alignment with PLC practices in Nova Scotia schools
- conduct and/or engage in relevant action research and provincial evaluation work and encourage education faculty to use the findings of this research in their own teaching
- collaborate authentically with system partners
- support ongoing access to new research and new thinking through effective knowledge mobilization and knowledge transfer processes

6.0   ISSUES

The PLC Study Committee was created by the Minister of Education to provide a forum for learning and to facilitate dialogue among partners about the critical supports needed for job-embedded teacher collaboration. There are three primary challenges facing every public education system who is trying to create time and space for teachers to meet together in professional learning communities. Nova Scotia is among the leading jurisdictions in the world who are determined to create systematic opportunities for this work to happen effectively on a regular and ongoing basis.

The three primary challenges are:
  • How do we ensure that teachers and principals have the skills and knowledge to work effectively and productively in a PLC-rich environment?
  • How do we provide time on a weekly or bi-weekly basis as part of the regular school schedule to allow groups of teachers to meet to discuss achievement data, student work and intervention strategies?
  • How do system leaders listen together in a deep and reflective way to learn and support the PLC practices that are most effective in different contexts, and how do we remove obstacles and barriers that are not supportive of PLC work for long term sustainability and student achievement?

There were many different views and perspectives shared and debated on these three critical issues during the deliberations of the PLC Study Committee. If the answers were easy, the work would have been done. The answers are not easy and there is more than one path to consider. Our cultural history, value boundaries, and inter-organizational trust and courage all play a role in defining the level of innovation and systemic change that partners can support.

The following section identifies the agreed-upon goals in each of these three areas and attempts to present the areas of agreement that support decision-making on the path forward. General agreement was achieved on action needed to support capacity-building and ongoing engagement during implementation. The committee considered a number of options to create time for PLCs. While committee members did not reach consensus as to the preferred approach, four approaches used in other jurisdictions have been put forward for consideration. The NSTU representatives on the committee as well as other members did not support lengthening the present school schedule to provide time for PLCs.

6.1   Capacity
How do we ensure that teachers and principals have the skills and knowledge to work effectively and productively in a PLC-rich environment?

The PLC Study Committee discussed, at length, the knowledge and skills for teachers and principals that would support effective professional learning communities in practice. These are included in Appendix B of the report.

The committee supports the development of modules and workshops intended to enhance the skills of principals and teachers related to PLCs; however, members also agree that the predominant thinking that the work of PLCs is best learned by getting started. According to international expert, Rick DuFour, perhaps the greatest insight he and his colleagues have gained in their work with school districts across the continent is that schools that take action and actually begin doing the work of a PLC develop their capacity to increase student achievement far more effectively than schools that spend years preparing to become a PLC by reading and even training.

Since many schools in Nova Scotia have already started their PLC journey we can support them and benefit from the lessons they learned during their initial experiences. For schools in the very early stages of PLC development, reading and learning about the journey ahead is still important but taking action may be more important.

6.2   Time for PLCs
How do we provide time on a weekly or bi-weekly basis as part of the regular school schedule to allow groups of teachers to meet to discuss student work and their teaching practices?

Providing regular, well-defined time for teachers to meet is essential to creating and fostering successful PLCs. Research is consistent in stating that if the time is not well-defined and protected from other activities in the school, then the power of PLCs will not be fully realized.

The Committee spent considerable time reading and learning about the different ways schools have managed to create time for learning communities to meet, including schools in Nova Scotia. One commonality is that it has not been easy and schools have had difficulty creating time for learning communities on a consistent or regular basis.

The Committee has identified four approaches that have been employed in other jurisdictions to provide time for teachers to meet as part of the regular school schedule. The first three approaches are based around bi-weekly early dismissals, to provide time for teachers to meet for two hours every two weeks. The fourth approach involves increasing the number of teacher FTEs at the school site, to allow for more flexible scheduling to provide teachers with

time to meet during the school day. Each of these four approaches is explained in detail in sections 6.2.3 and 6.2.4 of this report, in terms of their relevancy to Nova Scotia:

1. Increase the length of the instructional day to a minimum of 312 minutes and allow for bi-weekly early dismissals

2. Recognize professional learning time as instructional time and allow for bi-weekly early dismissals without changes to the length of the instructional day

3. Re-distribute three of the four board- and Department-defined in-service days (as defined in TPA) to offset the time needed to provide bi-weekly PLC time as part of option 1 or option 2

4. Increase the number of FTEs in the school to enable more flexible scheduling to provide time for teachers to meet during the regular instructional day

The Committee discussed each approach at length and was unable to come to consensus as to which approach to recommend to support PLCs in the Nova Scotia public education system. The approaches have differing effects on the constituent groups we hope to engage and there is significant disagreement about the best way to proceed.

6.2.1   Time for PLCs in Nova Scotia

Nova Scotia schools have been engaged for years in trying to find time for teachers to meet as a regular part of their day. Almost all principals who participated in a survey of 22 schools across all boards indicated that it was very difficult to find the time for teachers to work in learning communities, particularly in smaller and medium-sized schools, which often have less flexibility in their schedules. A number of principals noted that their boards created this additional time by adding minutes to the day (to maintain the 300 minutes of minimum instructional time) and banked the time to support early dismissals of students, typically on a bi-weekly basis. Some schools were permitted to bank time (adding 10 to 15 minutes per day to ensure the legislated minimum instructional time with students) and use this time to support early dismissals of students, typically on a bi-weekly basis. During early dismissal, students finish their school day at noon providing time for teachers to work together in the afternoon.

In a few larger schools principals have been able to schedule collaborative time within the normal cycle but the length of time and the frequency is dependent on the school schedule. Often classroom teachers find time to collaborate when the master schedule is structured so that students at a particular grade level are with specialist teachers, such as physical education or music teachers.

A number of principals noted that collaborative time was scheduled once a month either as a part of, or a replacement for, regular staff meetings. This was one of the most frequently mentioned strategies across the schools interviewed. Many of the schools surveyed use site-based professional development days to meet for teacher collaboration. In most cases a one or two hour block of the day is devoted to teacher collaboration.

Some schools have networked with other schools either in person or on-line to collaborate across grade levels and across schools. Teachers have created and utilized these opportunities to meet because they experience the positive effects that collaboration can have on their work. In some cases these efforts have been supported through the use of professional development funds to allow group of colleagues to work collaboratively, during the school day, on a specific learning community project.

While these efforts are laudable and certainly speak to the value that teachers have placed on collaborative time, they are not long-term sustainable strategies. Nor do they support the deep shift in culture of the teaching profession, away from the norm of isolated practice to one of developing collective solutions to ensure all students learn.

6.2.2   The Instructional Day

The Education Act Ministerial Regulations delineates the number of instructional hours for students at different grade levels, with a minimum of 300 minutes (5 hours) per day for most grades and 230 minutes minimum for grade primary students. The maximum amount of instructional time is 360 minutes. The Regulations further define instructional hours as time during which students are being instructed and/or supervised by a teacher.

Most schools in Nova Scotia have established schedules that adhere to the minimum amount of instructional time, although a significant number have allocated approximately 310 minutes for instructional time. The collective agreement with the Nova Scotia Teachers Union allows for 10% of the instructional day to be allocated to marking and preparation time. Due to semestering, some high school schedules provide teachers with more time during the instructional day. This may provide time for teacher collaboration, particularly in larger high schools.

In terms of student achievement, there is no clear research that highlights a discernible difference in the assessment outcomes of students in schools with different amounts of instructional time within this narrow range. In other words, it does not follow that a school with a 300 minute instructional day is inferior to a school with a 315 minute instructional day.

That is not to say that teacher-student contact time is not important, but rather that the effective use of time has a greater impact on student success than the time teachers and students spend together. Put simply, the quality of teacher-student contact time has a greater influence on student achievement and success than the quantity of contact time. As Dr. John Hattie explains in his book *Visible Learning*, ensuring that time is used productively is more important than adding to the school day. Dr. Hattie cites a number of studies in which "at best half the student time in class involves engagement in the class activity." Dr. Hattie explains that this has led a number of experts to conclude that "making the available school time more productive should be the key to enhancing learning – and not merely extending the school day or year" (Hattie, p. 185).

6.2.3   Approaches to Provide Time for PLCs

The work of the PLC Study Committee served to identify the most common paths jurisdictions employ to find time for teachers to meet in PLC teams. These approaches would enable time for teachers to meet bi-weekly for a half-day. The first three approaches would see the practice of early student dismissal that is currently present in three school boards being utilized across the system. The estimated time required to support bi-weekly teacher collaborative planning sessions (beginning in late September, and excluding December and June), is 1,920 minutes (16 x 120 minutes). The fourth approach would entail additional human resources and financial cost to the system. All four approaches are aimed at providing regular blocks of time for teachers to work collectively to increase student achievement and determine ways to improve instructional practices so that students are deeply engaged in their learning. They would however have different levels of receptivity among teachers and parents and these differences need to be carefully considered in light of what we want to accomplish. As stated earlier, PLC Study Committee members had strong views about which approach would be most effective and many were clearly either not supportive of approach 1 or not supportive of approach 2 as the best way forward for Nova Scotia.

Approach 1

The first approach maintains the current minimum hours of instruction, while allowing for regular, bi-weekly early dismissals. This would require ensuring that all schools have a minimum of 312 minutes of student instruction per day for 9 days with 180 minutes on the 10th day within a two-week period.

Schools currently have 187 days when instruction is offered to students. At a minimum of 300 minutes per day this would mean 56,100 minutes of instructional time for students per year. If 16 of these days are 180 minutes in length (with early dismissals allowing for 120 minutes of PLC time) then the remaining 171 days (187 days minus 16) must provide for 53,220 minutes to meet the current minimum requirements of the Education Act. This equates to approximately 312 minutes per day.

Approach 2

Current research establishes that teacher collaborative learning focused on the learning needs of students is not separate from instruction but integral to it. As such, the second approach is to allocate the PLC time from within the existing instructional day and not add additional minutes of instructional time for those schools who are at the minimum level of 300 minutes.

Approach 3

A third approach could be aligned with either approaches 1 or 2 and promotes re-distributing three of the in-service days available at the discretion of the boards or the Department provided for in the collective agreement (Article 25.05 iii) to augment (or offset) the time needed for teachers to meet bi-weekly in PLCs. This would provide schools with 900 of the 1,920 minutes that would be required for teachers to meet for two hours on a bi-weekly basis. The remaining 1,020 minutes would come from the instructional day, either by adding time as in approach 1 or by recognizing instructional time as including professional learning time as in approach 2.

Approach 4

The fourth approach used in some jurisdictions is to add teaching staff to the school to enable more flexible scheduling to provide time for teachers to meet during the school day. This approach has been used in some OECD countries, including a number of American jurisdictions.

6.2.4   Discussion of Approaches

There is significant concern that teachers may view the addition of 'PLC time' as an add-on to their workload, even if they understand and support the underlying purpose. As discussed in the section on building true community, effective PLCs require significant and deep cultural change; they cannot be mandated. We need teachers with us if we are going to be successful.

In considering all four approaches it is also important to note that school schedules vary significantly and the impact of adding time to the instructional day and supporting early dismissals every two weeks will need to consider the context of each school and clusters of schools who share busing schedules.

Approach 1 maintains the current definition of instructional time as time in which teachers are providing instruction to and/or supervising students. This approach further ensures that the current amount of teacher-student contact time will be maintained, while providing regular bi-weekly time for teachers to work collaboratively. However, in order to maintain the current level of instructional time and provide bi-weekly time for teachers to meet, approach 1 requires the addition of 12 minutes to the instructional day, the equivalent of nearly 7 additional instructional days.

A related consideration is the impact on the school day for those schools that are already at the 315 minute level in terms of instructional minutes, although most schools in Nova Scotia are at the minimum level of 300 minutes. If time is added to the school day for schools at the minimum level of minutes there may be an impact on the other schools due to a domino effect with the interlocking bus schedule.

Approach 2 proposes that instructional time should be defined as including professional learning time. This understanding of 'instructional practice' would require amendments to the Education Act, which outlines instructional time as quantified in terms of the time that is spent teaching students.

We recognize that parents may not have a clear understanding of the direct link between teacher learning and student learning and, as such, may hold the view that the early dismissal of students to allow teachers to meet collaboratively to discuss instructional and assessment strategies is not part of a regular instructional day. If we hope to see professional learning communities take hold in Nova Scotia, it is critically important that we communicate to students, parents, and others about this important linkage. Teachers who better understand new approaches to teaching, who understand the challenges of the 21st century learner, the role of assessment in improving student learning and engagement, and who can effectively differentiate their instruction will inevitably bring students to higher levels of achievement and learning. The time used for this professional learning does not take away from student learning but serves to strengthen it.

Having said that, it is noted that there is some incongruity in the Nova Scotia approach in terms of how we organize and implement other forms of professional development. This misalignment should be addressed over time in the context of this new site-based approach but it is not addressed in this report.

Approach 3 would see the re-distribution of three of the four in-service days thus reducing the impact on teacher-student contact time. This has the benefit of maintaining a relatively high level of teacher-student contact time and may assist in building parent support for the direction. Approach 3 does, however, reduce the number of school-based PD days available to teachers, principals and school boards. It is important to note that the reference to using available in-service days to support the PLC direction interacts with the Teachers Professional Agreement and understandings among the Department, school boards and the NSTU as to how these days are allocated and utilized. Any change in this regard would involve significant discussions with all parties involved to determine the options available.

Unlike the previous three approaches, approach 4 does not propose changes to either the length or structure of the school day, nor does it suggest that school-based PD days should be re-distributed to support teacher collaborative learning. This approach suggests that allocating additional teacher FTEs would allow teachers to meet in collaborative groups during the school

day. While additional teaching staff would add flexibility to the school schedule, it would require significant resources to implement at a time of fiscal restraint. All members of the committee recognized the fiscal constraint in which this discussion is taking place. However, they wanted the inclusion of this option because it is recognized as the only approach that can provide collaborative time for teachers everyday and therefore needs to be recognized as a legitimate, even if an unlikely, option for Nova Scotia at this time.

Weighing the Approaches in the Nova Scotia Context

The two primary approaches put forward to create a block of time bi-weekly for teachers involves the early dismissal of students and the possible banking of students' classroom time. Banking of time to support early dismissal is currently happening in 3 of the 8 school boards. Committee members support the idea of early dismissals for PLC time however there is significant disagreement as to how this would be accomplished. Many of the school-based members feel that lengthening the school day would be counter productive and not the best way to proceed to build the critical support for professional learning communities.

Although some of the time may be offset if approach 3 is pursued and acceptable, a core decision is required as to whether or not additional time should be added to the day to maintain the 300 minutes of teacher-student contact time, or if no time will be added to the day recognizing that teacher learning time is part of the instructional day. Both approaches require at least some regulatory changes so that the instructional time requirement is specified in a manner that provides greater flexibility to schools and that recognizes the broader context of student learning. A goal is to provide all school boards with the same regulatory framework and flexibility in this regard. (Education Act Ministerial Regulations 3 (1) states "*Except as otherwise provided in this Section, there shall be not less than five hours of teaching in each classroom on each school day; hours of teaching shall mean time during which students are under instruction or otherwise under control or supervision by a teacher and shall not include time spent by the teacher in marking tests or examination papers, for grading and classifying students, when no students are present or under the teacher's control*.")

These two approaches have significant differences in terms of their acceptability and impact on constituents, their support of, commitment to and subsequent actions concerning the PLC direction, and to the implementation requirements. It is important to understand the impacts in considering the optimal approach in Nova Scotia as these impacts can play a significant role in building commitment and engagement during this change process.

APPROACH	Advantages	Disadvantages
Approach 1	- may be easier to communicate the positive aspects of the change to parents and the community to gain their support - no reduction of instructional time for students - strong support from school board senior administration	- may be viewed as increasing an already heavy teacher workload while school board administrative supports being reduced - could increase resistance - if a domino effect occurs, could penalize teachers who have already increased their work day - lacks support of some key partners
Approach 2	- more support from the teaching profession - changes the notion of teacher work to include both teaching and learning time - provides a positive message about the importance of the change to those who must embrace the change - recognizes the current teacher workload - strong support from NSTU	- reduces instructional time for students - could increase concerns about ability to cover curriculum outcomes - may add some additional difficulty communicating the positive aspects of the change to parents and communities to gain their support - lacks support of some key partners

6.3 Engagement and Learning for System Change

How do system leaders listen together in a deep and reflective way to learn and develop PLC practices that are most effective in different contexts, as well as remove obstacles and barriers that are not supportive of PLC work for long term sustainability and student achievement?

During any complex reform initiative leaders must find ways to eliminate or significantly reduce identified obstacles to the desired change. John Kotter from Harvard University teaches this within his acclaimed change model. During his research Dr. Kotter acknowledges that permitting obstacles to block the new vision is a common error of organizational change efforts.

Committee members discussed at length a number of these obstacles and agree that, if we are to experience the greatest benefit from our PLC work, we must remove barriers to our success, such as teacher workload, initiative overload, a fragmented focus, increasing paperwork, and principal time focused on management tasks.

Committee members also agreed that it is critical that we do not fall into the traps of top-down mandates and a one-model-fits-all mind set. The approach we are taking would involve educators and other partners in public education being involved in many discussions over the next two years that will collectively shape our PLC model or approach in Nova Scotia. We will find our way through the ongoing and authentic engagement of many stakeholders across our province, learning from our schools' experiences, and making adjustments as we go. We will construct our PLC future together.

7.0   RECOMMENDATIONS

The following set of recommendations support the development of a provincial framework that we consider to be the most promising practices for professional learning communities.

Recommendations related to the approach in Nova Scotia:

1. Nova Scotia adopt the following definition to clearly establish our beliefs about the purpose and outcomes of an effective professional learning community:

> *A Professional Learning Community is a group of professional educators working together on evidence based collaborative teams in a climate of trust, innovation, risk taking, and reflection to enhance their practices so that all students are successful in learning essential curriculum outcomes.*

2. The four components of the Nova Scotia approach to PLCs include:
   - a focus on improvement in student learning
   - collaborative learning and shared leadership
   - continuous inquiry and changing practices
   - a shared purpose, vision, values and goals

Recommendations relating to creating urgency and understanding:

3. All partners acknowledge and promote the understanding that improvement in student achievement is needed in Nova Scotia. While it is important to celebrate the achievement gains we have made in recent years, it is equally important to communicate that we can make further gains in student learning.

4. All partners play a proactive role in creating the urgency for this change in Nova Scotia related to the development of PLCs. The most active partners in championing this direction should be the Department of Education, elected school boards and the Nova Scotia School Boards Association, the Nova Scotia Teachers Union as well as teachers, principals and staff. Other key partners should include the universities with teacher education programs, school advisory councils, the Federation of Home and School Associations of Nova Scotia, and the Federation des parents acadiens à Nouvelle-Ecosse.

5. The Department of Education with school board staff coordinate opportunities to inform, educate and learn from elected school board members and parent organizations regarding the PLC approach and plans in Nova Scotia.

Recommendations relating to supporting the work of PLCs:

6. All partners accept the roles and responsibilities outlined in Section 5.4 of this report, and make adjustments to create the supportive environment for PLCs to thrive.

7. School principals provide leadership for PLCs by participating in the work of PLC teams and monitoring both the process and outcomes in their schools. School principals also provide regular updates to school board staff on professional learning communities within the school.

8. Innovation Configuration (IC) maps be developed to support a strong understanding of PLCs so that principals and staff have a sense of the journey ahead. This will help school communities have a vision for success and they will be able to systematically monitor their progress.

9. To build capacity across the province:
   - the Nova Scotia Educational Leadership Consortium create a module or a series of workshops on developing, supporting, and sustaining professional learning communities in the Nova Scotia context;
   - ensure that course content in the Instructional Leadership Program is connected to supporting principal leadership for professional learning communities; and,
   - encourage school boards to include modules and workshops on PLCs in their professional leadership programs.

10. Assess the current roles of school board-based consultants and coordinators to ensure appropriate emphasis is placed on supporting the needs of PLCs as identified by those communities.

11. Foster teacher and principal networks across the province. Once these networks are formed and operating, provide opportunities for these PLC networks to reach outside the province to other jurisdictions.

12. Embed a strong technology component in the PLC approach to support networking and learning across collaborative teams and schools around the province. The Department of Education, NSTU, and school boards should collaborate to create and support these online resources, including tools such as webinars and online forums.

13. Identify high quality resources about professional learning communities and make these materials available on the list of Authorized Learning Resources.

14. The NSTU take a leadership role in examining the use of article 60 funds so that these board-based funds can be accessed consistently across the province for PLC work. In response to teacher initiated professional development, these funds can be used for teachers visiting

other schools, inviting specialists to work with teachers, supporting groups of teachers working together across schools, and allowing them to attend PLC focused workshops.

15. School board and department staff model professional learning community practices in their work setting.

16. School boards and the department recognize those schools that are experiencing success through PLC practices and celebrate and communicate these successes.

17. Use planned conferences and workshops to create PLC learning opportunities over the next two years, such as the October Conference Day, Principals in Focus, regional workshops and any other provincial forums on education. Organize a provincial summit on PLCs to profile best/promising practices within Nova Scotia and outside the province.

Recommendations relating to time:

18. Regular time be scheduled, and protected from other uses, in the weekly or bi-weekly school schedule to be used by groups of teachers engaged in professional learning community practices.

19. School boards to coordinate school and busing schedules to support weekly or bi-weekly time for PLCs.

20. The Minister of Education approve early dismissal for students for one afternoon bi-weekly for all schools in the province. Currently three school boards are permitted to exercise this allowance through the banking of time. This time is to be used for teachers to work in PLC collaborative teams focused on increasing student achievement and improving teaching practices.

21. Consider the four approaches outlined in section 6.2 in this report within the Nova Scotia context.

Recommendations relating to communications:

22. Develop a comprehensive communication strategy using existing provincial expertise to communicate the purpose of and vision for PLCs in order to build a solid and common understanding of the provincial framework and the benefits of PLCs for both student and teacher learning. The co-constructed communications strategy would include defined roles and consistent messages for the Department, school boards, principals, NSTU, and the NSSBA to highlight the collaboration and commitment of partners. Use a variety of communication methods including AVISO, partner websites, and publications to promote best practices and to build awareness and knowledge with respect to PLCs.

23. Proactively and directly dispel the anticipated concern that the PLC approach be seen as an "add on" by establishing the connections between PLCs and programs such as school accreditation, school improvement, planning for improvement, mentoring and coaching. Illustrate the link to authentic classroom assessments, team teaching, professional growth plans, collaborative teams, provincial assessments, and student learning.

Recommendations relating to learning and change:

24. Design feedback loops while schools are engaged in PLC activities so that teachers and principals can share information in a safe environment. Conduct regular and ongoing consultations with groups of teachers. This will give teachers the opportunity to provide honest feedback with respect to the effectiveness and progress of professional learning community practices in their schools. In this way we can move beyond primarily external accountability measures. It means creating internal professional responsibility, motivation and commitment among all educators to support the work of PLCs. These consultations will allow partners to make adjustments and provide additional supports where practices are less effective.

25. Highlight the best and most promising practices from the professional literature and research, and identify Nova Scotia schools demonstrating these practices. Create case studies and videos of these schools. The Department of Education needs to document and communicate PLC success stories through the sharing of vignettes, case studies, and networked learning discussions.

26. Engage universities in this provincial change initiative and give priority to those with teacher education programs. Involve our universities in researching the PLC approach and identify successful practices in Nova Scotia. This will involve the collection of feedback and data from teachers and schools boards. It is further recommended that the research with respect to promising practices for PLCs be reflected in teacher education programming at both the undergraduate and graduate levels in Nova Scotia.

27. Move the PLC approach forward in Nova Scotia by using a deep engagement model of change where we take the time to collaboratively construct and communicate a shared understanding of the change.

28. To support the coordination and communication of our PLC work, both within the school boards and across the province, it is recommended that school boards and the Department of Education identify a liaison person. These liaison people will work together through a provincial advisory group to assist moving PLCs forward. Representatives would include the Department of Education, NSTU, NSSBA, universities, and all boards.

8.0   THE WAY FORWARD

Authentic Change through Engagement

Deep engagement means transforming schools into PLCs from the inside out, rather than by top-down and bottom-up change strategies. It means listening, sharing ideas, and involving as many key people as possible as the change moves forward. Rather than imposing a model and PLC strategies, Nova Scotia educators will be engaged in collaboratively constructing the PLC approach over the next two years. This will mean having the right people involved in having the right conversations and interactions so that everyone acts in concert to move the change forward.

Co-constructing the change will help ensure that all participants have a voice, choice, and responsibility in the creation of successful PLCs. Successful change cannot be seen as a top-down directive, rather all partners must participate in the change process. By co-constructing PLCs we are communicating that we have confidence in one another and that many minds and hearts will bring the change wider and deeper. The engagement process will inevitably create more buy-in and ownership. This will help ensure that the change is experienced as a real partnership and not as a top-down initiative. An engagement strategy means "a listening and learning, rather than a telling exercise."

The following recommendations comprise an effective and comprehensive Engagement Strategy to lead Nova Scotia through this major change process.

•   Organize a series of visits to each regional school board and elected board in Nova Scotia to share information from this report and to facilitate conversations about their experience with professional learning committees. The intent is to meet with a small group of leaders from schools and central offices to begin talking about how to build our PLC capacity as a province.

•   Meet with many different stakeholder groups including system leadership at all levels, ANSEA, NSSBA, School Advisory Councils, the Home and School Association, regional board staff, the NSTU provincial executive, universities and the Department of Education staff. The purpose of the meeting is to share information from the report and to listen to their concerns and suggestions about how to move forward. We want many high quality interactions where people get the message that we are in this together and we need all the help we can get.

•   Reach beyond these organized groups and communicate with as many people as we can, as fast as possible. We want to reach principals, teachers, business leaders, parents, community groups that support schools and students, and municipal councils with information about what is happening with PLCs in the province and why. This will

mean using a web site, regular emails, press releases, brochures and letters from the Minister of Education.

- Develop ongoing feedback mechanisms so that change leaders can receive important and timely data to inform their decision making and to help us understand what actions are influencing what results. We are operating within a complex education system and often these connections are not clear.

- Engage with the universities that have Schools of Education to conduct in depth research with respect to the change process and the positive effects on student learning and success.

- Write short 1 or 2 page reports whenever we collect data from the system. Then widely circulate this report describing what was learned about their concerns, needs and opportunities. It will become a snapshot of what's happening for anyone interested in reading it.

- Identify influential leaders across the province who have a deep commitment to creating learning communities in schools and stay in contact with them on a regular basis. They will become the champions of this change. Give them current information about the initiative and ask their advice:

  - What is the right thing to do?
  - How do we move forward under these circumstances?
  - What options do we have and what's your best advice?
  - What's causing these problems and how do we solve them?

- Engage in meaningful dialogue with those stakeholder who oppose or resist PLCs and/or the change process, and listen carefully to their perspective and experiences. We need to learn from our detractors and take action on the issues and obstacles they identify. Remembering, the focus is always on being successful, not winning everyone over.

- Provide easy-to-understand support materials that people can share with one another. As well, these support materials need to be easily available so that people can have access to the most current and best material on PLCs.

- Use storytelling as a way to communicate where Nova Scotia schools are achieving success and why they are experiencing growth. Storytelling can be a powerful change strategy because a good story captures peoples' attention, holds peoples' attention and they often can relate to the characters and circumstances. It is also tangible evidence that PLCs are unfolding around us.

- Move conversations into talking about the future, the vision and goals we are trying to achieve. It means stepping-up and talking about what's possible, rather than dwelling on what someone thinks "should" happen. Conversations about what's possible taps into peoples' creative processes that can stimulate different thinking and lead to changes in behaviour.

- Develop an implementation plan that ties together all the different action pieces into a coherent whole. The plan cannot become a non-negotiable blueprint, but rather a description of an organic process or path forward that is subject to change as conditions change.

- Develop and assign critical friends to provincial, regional and school-board leaders who are in the forefront of creating PLCs in our schools. These 'coaches' can provide expertise in the change process and more importantly help leaders reflect on their practices and think through their next steps.

In a nutshell, engagement is about getting as many people as possible in a network of whole-hearted support and participation. This is the challenge and the opportunity. This is how change becomes deep, lasting and systemic.

Appendix A

PLC Study Committee Membership

Dale Armstrong
Coordinator of School Administration
Halifax Regional School Board

Janet Briggs
Principal, Thompson Junior High
Cape Breton-Victoria Regional School Board

Bill Bruhm
Member, Provincial Executive, Nova Scotia Teachers Union
Principal, New Germany Elementary School, South Shore Regional School Board

Ron Brunton
Executive Staff Officer
Nova Scotia Teachers Union

Julian Dease
Teacher, Yarmouth High School
Tri-County Regional School Board

Shannon Delbridge
Executive Director, Corporate Policy
Department of Education

Vic Fleury
President
Nova Scotia School Boards Association

Angela Gillis
Provincial Executive Member, Nova Scotia Teachers Union
Teacher, St. Stephen's Elementary School, Halifax Regional School Board

Dave Jones
Director of Programs
Annapolis Valley Regional School Board

Alan Lowe
Senior Executive Director, Public Schools
Department of Education

Jack MacDonald
Principal, Tamarac Education Centre
Strait Regional School Board

David MacKinnon
Dean of Research and Graduate Studies
Acadia University

Scott Milner
Director of Programs
Chignecto-Central Regional School Board

Carole Olsen
Superintendent of Schools
Halifax Regional School Board

Normand Poirier
Program Consultant
Conseil scolaire acadien provincial

Nancy Pynch-Worthylake
Superintendent of Schools
South Shore Regional School Board

Jan Routledge
Teacher, Coldbrook School
Annapolis Valley Regional School Board

Lawrence Ryan
Consultant/Facilitator
Department of Education

Jeremy Smith
Senior Policy Analyst, Corporate Policy
Department of Education

Appendix B

Knowledge and Skills of Teachers and Principals
to Support Effective Professional Learning Communities

Teachers

KNOW (knowledge)	BE ABLE TO DO (skills)
• Understand the mission and vision or the organization • Know the characteristics of an effective PLC • Understand evidence-based practices • Understand group dynamics and decision making • Know content and how to teach it in light of the relevant and compelling research • Understand how students learn • Understand how to use data and information to improve student learning and to inform teaching and assessment practices • Understand distributed leadership • Understand authentic assessment	• Value ideas and contributions from all stakeholders / be open to new ideas and different points of view • Recognize and analyze relevant data • Use data to inform instructional decisions • Participate actively and constructively in building consensus and working within the group • Engage students in active learning and assessment • Engage themselves in active learning and assessment • Collaborate • Celebrate success • Listen and communicate effectively • Practice a range of effective instructional and assessment strategies

Principals

KNOW (knowledge)	BE ABLE TO DO (skills)
• Understand mission, vision, values and shared goals • Know the characteristics of a learning community • Understand evidence-based practices • Understand distributed leadership • Understand the political dynamics • Understand how adults learn • Understand authentic assessment • Understand the use of data and information to inform teaching and assessment practice to improve student learning/success • Understand change process • Understand group dynamics and decision making • Understand how students learn	• Be able to articulate characteristics of a learning community • Facilitate the development of shared mission, values and goals • Value ideas and contribution from all stakeholders; support innovation, new ideas • Recognize expertise (all types) • Practice shared leadership • Lead and build consensus and modeling collaborative decision making • Engage staff and students in active learning • Collaborate and inspire collaboration • Deflect distractions • Communicate effectively with all stakeholders, including SAC, community • Listen actively without judgement • Support data collection • Encourage reflection • Create trusting relationships • Manage conflict/difficult conversation • Set expectations of learning for all / model life long learning • Sustain the vision and set tone of climate/culture • Celebrate success • Monitor overall progress