

*Leading Student Achievement: Our Principal Purpose*  
**Taking the Project to the Next Level**

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Kenneth Leithwood

**Introduction**

*Leading Student Achievement: Our Principal Purpose* (LSA) is now beginning its third year. Making a significant contribution toward the literacy and math achievement of elementary school students in the province is its purpose while improving the instructional leadership capacities to be found in schools remains its central strategy. Over the first two years of the project, LSA participants have devoted the largest proportion of their time and effort in the project to learning more about and implementing professional learning communities (PLCs) in their schools and to collaborating in principal learning teams to build instructional leadership capacity.

Consistent with one of the main principles on which LSA is based (evidence-based decision making), results of the first phase of the project evaluation have quite directly informed deliberations among members of the project steering team and Secretariat about what should be done over the next year in order to take the project to the next level. This paper:

1. briefly summarizes the most relevant findings from the project evaluation, the evidence used to help decide on the next steps for the project;
2. describes earlier priorities that remain important to continue; and
3. proposes some new priorities with the potential to take the project to the next level.

As a whole, this paper aims to develop a conception of “Instructional Leadership” uniquely suited to the goals of the LSA project. This conception begins by acknowledging that leadership effects on students are almost always indirect. This means that successful school-level leaders have direct and positive influences on conditions in the school and classroom which in turn improve the learning of students. Some of these conditions, while potentially quite powerful in the long run, are several levels removed from students; a PLC is a clear example of this type of condition. Other conditions leaders are able to influence, however, have a direct and powerful impact on student learning. It is the exercise of influence on the further development of these key learning conditions that captures our meaning of “instructional leadership” in the context of this project.

## Evidence Used to Help Decide on the Next Steps

Evaluation of the first phase of LSA entailed the collection of both survey and interview data from principal participants, along with surveys of teachers at two points in time<sup>1</sup> and an analysis of three years of EQAO student achievement evidence.

What do these results suggest should be the next steps for the project? How can the project be “taken to the next level”? As the evaluation made clear, the project has not yet likely had significant impacts on student learning although that clearly remains the long term goal. The project has, however, stimulated desirable changes in leadership team practices and increased the collaboration of both leaders and teachers in professional learning communities. Teachers now perceive those in formal leadership roles (teachers and administrators) to be having moderate to substantial influence on their work. In addition, LSA participants now believe they benefited from their project experiences and became much more focused on teaching and learning in their schools, especially in relation to literacy and numeracy. Substantial increases were reported in leaders’ uses of evidence to make decisions about literacy and numeracy instruction and for target setting in these areas of the curriculum.

The first phase of project work, where it was done effectively, set the stage for productive efforts toward creating in schools those conditions with direct and powerful effects on student learning. Put differently, the first phase of the project seems to have been primarily concerned with “second order” changes. With them more or less in place now, school staffs are in a much better position than they would have been otherwise, to respond productively to the challenge of making first order changes. Results of the evaluation recommend the establishment of three objectives to guide LSA initiatives over the next year:

1. focus the content of the conversations within district principal learning teams and school PLCs on conditions which robust evidence tells us have the most powerful direct effects on student learning;
2. deepen participants’ understandings of effective PLC processes and refine their skills in managing such processes in their own PLCs; and,
3. significantly extend principal and teacher capacities for effective literacy and numeracy instruction.

Together, these objectives are intended to capture more firmly much of the valuable ground gained by the project in its first phase and significantly extend that ground toward the project’s goal posts.

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<sup>1</sup> See Leithwood, K., & Jantzi, D. (2007). *Leading student achievement: Our principal purpose: First Year Evaluation Results*. Toronto: Final report prepared for the Ontario Ministry of Education, Literacy and Numeracy Secretariat.

## **Existing Priorities That Warrant Ongoing Attention in the LSA Project**

The project's two main priorities, to date, have been the development of professional learning communities (PLCs) within and across schools and the improvement of instruction in literacy and mathematics. The assumption has been that PLCs provide both the structure and stimulus for instructional improvement. Clearly these two priorities warrant continuing attention as the project moves to its next phase.

*Professional learning communities.* Much of the attention devoted to development of PLCs in the project has been encouraged by the wide-spread professional popularity of the PLC concept, along with the extensive training materials that have been developed by its advocates and champions (e.g., Dufour & Eaker, 1998). The positive consequences associated with PLCs, however, are premised on the general assumption that when teachers and administrators spend time together thinking about how to improve instruction in their schools, the outcome will be both more sophisticated and better implemented than when teachers take on the same challenges in isolation.

What would it take, we need to ask at this next stage of LSA work, for this to be the case? To help stimulate productive conversation about this question, let me propose three requirements PLCs would have to meet in order live up to the expectations we have for them.

1. The PLCs "collective brain" is smarter than the brains of its individual members;
2. the PLCs collective will almost always prevails over the motivations of its individual members; and
3. participation in the PLC contributes to its individual members job satisfaction, commitment and sense of professional efficacy, as well as reducing members' job-related anxiety and stress.

PLC leaders might ask themselves and their colleagues the following questions during this stage of their work:

- Are there other important requirements for a productive PLC?
- How well are these requirements reflected in our PLC?
- What would we need to do to further develop those requirements?

*Focused instruction.* Improving literacy and math learning among students in LSA participants' schools depends on developing productive learning conditions in classrooms and schools. Without doubt, the most critical classroom learning condition is the quality of instruction provided to students. Appropriately, then, the province has devoted enormous resources through the Secretariat to the professional development of school staffs about powerful forms of literacy and math instruction.

The nature of such instruction is captured succinctly in the measures of math and language instruction used in last year's survey of teachers in LSA project schools. These measures reflect a situated and social - constructivist approach to instruction consistent with our current understandings of how children learn; the measures are also consistent

with directions suggested by most sets of teaching standards associated with curriculum policy in many jurisdictions, including Ontario.

In spite of their rich lineage, however, last year's evaluation failed to find a significant relationship between them and EAQO measures of student learning. While last year's evaluation had serious limitations, this result should give us pause. We cannot assume that just helping our teaching colleagues implement these instructional practices will have the results we aim for. More instructional problem solving may well be in order. For example, a very recent study (Wahlstrom & Louis, in press) found significant positive effects of an approach toward instruction the researchers labelled "focused".

Such instruction is characterized by very active engagement on the part of the teacher in whatever instructional approach he or she chooses to use in the classroom. Focused instruction speaks to the explicitly goal-directed nature of what a teacher is intending to accomplish, the constant monitoring by the teacher of what students are doing and interventions by the teacher to help ensure that students are as actively engaged in meaningful learning as much as possible. So instructional efforts in LSA schools, going forward, should not take for granted that current instructional practices will do the job. These efforts, as well, would do well to emphasize the ongoing attention and feedback of the teacher to the work of individual and groups of students.

### **New Priorities for the LSA Project: School Conditions with Powerful Direct Effects on Student Learning**

One of the three goals proposed in this paper for the next stage of the LSA project is to focus the content of the conversations within PLCs on conditions which robust evidence tells us have the most powerful direct effects on student learning. Focused instruction is likely the most important classroom-level conditions for such discussion and one that continues an emphasis from earlier stages of the project.

In addition to classroom instruction, compelling bodies of evidence have now accumulated in support of at least five school-level conditions including *academic press*, *disciplinary climate*, *collective teacher efficacy*, *teacher trust in colleagues*, *students and parents*, and *time for learning*. Aside from their powerful direct effects on student learning, these conditions have two other qualities in common. They are properties of the group and they are "soft" – socio-psychological states, rather than bricks and mortar, money, contracts or teaching materials. Both of these qualities make them quintessentially suitable for the attention of school-level leaders. Those leaders physically in the school can act, often within their PLCs, in ways that are more sensitive to the underlying beliefs, values and emotions from which these conditions spring. Furthermore, there is little dependence on resources controlled largely outside the school in order to nurture the development of these school conditions.

This section describes each of the five school conditions more fully. In each case, the condition is clarified or defined, evidence about its effects on student learning is

summarized and some examples of leadership practices to help improve the condition in one's school are outlined. A small sample of the research about each of these conditions is summarized in the Appendix to this paper.

### **Academic Press (AP)**

*Concept.* In schools with academic press, administrators and teachers set high but achievable school goals and classroom academic standards. They believe in the capacity of their students to achieve and encourage their students to respect and pursue academic success. School administrators supply resources, provide structures and exert leadership influence. Teachers make appropriately challenging academic demands and provide quality instruction to attain these goals. Students value these goals, respond positively, and work hard to meet the challenge.

*Effects on students.* Research on effective schools identified academic press as one important correlate of effective school climate and linked it with student achievement as early as the late 70s and early 80s. Of the more than 20 empirical studies of Academic Press which have been published since about 1989 (about half of them unpublished doctoral dissertations), by far the majority have reported significant, positive, though moderate relationships between academic press and student achievement, most often in the area of math, but extending to other subjects such as writing, science, reading and language, as well. Academic Press is described as explaining almost 50% of the between-school variability in mathematics and reading in Goddard et al's (2000) study, for example, after controlling for the effects of students' family backgrounds. Most of the evidence suggests that a school's academic press makes an especially valuable contribution to the achievement of disadvantaged children.

*Leadership practices.* Academic press is one of the more malleable conditions for leadership intervention and a small number of studies have provided some guidance on the practices likely to increase a school's Academic Press (e.g. Alig-Mielcarek, 2003; Jacob, 2004, Jurewicz, 2004). Included among those practices are the following:

- promoting school-wide professional development;
- monitoring and providing feedback on the teaching and learning processes;
- developing and communicating shared goals;
- being open, supportive, and friendly;
- establishing high expectations;
- not burdening teachers with bureaucratic tasks and busy work;
- helping to clarify shared goals about academic achievement;
- grouping students using methods that convey academic expectations;
- protecting instructional time;
- providing an orderly environment;
- establishing clear homework policies;
- monitoring student performance in relation to instructional objectives;
- base remediation efforts on the common instructional framework;
- requiring student progress reports to be sent to the parents; and
- making promotion dependent on student mastery of basic grade level skills.

## **School Disciplinary Climate**

*Concept.* In the last couple of decades, there has been a shift in the focus of research on discipline from individual students to the school. Willms and Ma (2004) argue that the traditional way of dealing with indiscipline, mainly at the classroom level, seems insufficient and that the disciplinary climate of the classroom and school has important effects on students. This climate is shaped by features of schools and the larger community. For example, classroom disruption can be a direct reflection of the conflict or tension between teachers and students across the school, as a whole.

Using a comprehensive U.S. data base, Willms and Ma (2004) developed a multi-dimensional conception of school disciplinary climate covering “student discipline perceptions and experiences, school culture, teacher classroom management, student engagement and commitment, school prevention and intervention in response to indiscipline, and conflicts in the social and cultural values between schools and students.” (p.10). Incorporating similar work by others, the dimensions of disciplinary climate include:

- students’ discipline concerns (e.g., drug use, physical conflicts);
- class disruptions (e.g., students disrupt class, noise and disorder in class);
- student absenteeism and tardiness;
- students counseling about discipline;
- students’ discipline experience (student had something stolen);
- the rules for behavior;
- race or cultural conflicts at the school;
- students’ behaviors and the punishments for misbehaviors at the school;
- teachers’ behavior (e.g., absenteeism); and
- teacher-student relations (e.g., students get along with teachers, fairness of discipline).

*Effects on achievement.* Research during the last decade, in particular, has produced consistent evidence demonstrating the contribution of a school’s disciplinary climate to the learning of its students. Importantly, a large proportion of this research has used very large data sets and sophisticated statistical methods (in particular, hierarchical linear modeling). By way of illustration, Ma and Klinger (2000) studied the entire Grade 6 student population in 148 schools in Alberta. Their results indicated that disciplinary climate and academic press both had significant absolute effects in mathematics, science, and writing. These effects were over and above the effects of selected student variables and average school SES; disciplinary climate was the most important determinant of academic achievement in this study.

*Leadership practices.* Existing research offers very limited guidance about what leaders might do to develop the disciplinary climate in their schools. What evidence there is (e.g., Benda, 2002; Leithwood et al, 2004) recommends flexible rather than rigid responses by leaders to disciplinary events and engagement of staff and other stakeholders in developing school-wide behavior plans. A broader body of evidence does indicate that “The principal is the most potent factor in determining school climate” and that “a direct relationship between visionary leadership and school climate and culture is

imperative to support teacher efforts that lead to the success of the instructional [and disciplinary] program” (Rencherler, 1991, cited in Benda, 2002). Clearly, near-term insights about the further development of this condition in schools will need to come from the collective wisdom of one’s colleagues and active experimentation in one’s school.

### **Collective Teacher Efficacy (CTE)**

*Concept.* Collective Teacher Efficacy is the level of confidence a group of teachers feels about its ability to organize and implement whatever educational initiatives are required for students to achieve high standards of achievement. The effects of efficacy or collective confidence on performance is indirect through the persistence it engenders in the face of initial failure and the opportunities it creates for a confident group to learn its way forward (rather than giving up).

In highly efficacious schools, evidence suggests that teachers accept responsibility for their student’s learning. Learning difficulties are not assumed to be an inevitable by-product of low socio-economic status, lack of ability, or family background. CTE creates high expectations for students as well as the collectively confident teachers. Evidence suggests that high levels of CTE encourage teachers to set challenging benchmarks for themselves, engage in high levels of planning and organization, devote more classroom time to academic learning. High CTE teachers are more likely to engage in activity-based learning, student-centered learning, and interactive instruction. Among other exemplary practices high CTE is associated with are teachers adopting a humanistic approach to student management; testing new instructional methods to meet the learning needs of their students; the provision of extra help to students who have difficulty and displaying persistence and resiliency in such cases; rewarding students for their achievements; believing their students can reach high academic goals; displaying more enthusiasm for teaching; committing to community partnerships; and having more ownership in school decisions.

*Effects on students.* While the total number of well-designed studies inquiring about CTE effects on students is still modest (about 8 studies), their results are both consistent and impressive. This relatively recent literature demonstrates a significant positive relationship between collective teacher efficacy and achievement by students in such areas of the curriculum as reading, math and writing. Furthermore, and perhaps more surprising, several of these studies have found that the effects on achievement of CTE exceed the effects of students socio-economic status (e.g., Goddard et al., 2000), a variable that typically explains by far the bulk of achievement variation across schools, usually in excess of 50%. High CTE schools also are associated with lower suspension and dropout rates as well as greater school orderliness (see Tschannen-Moran & Barr, 2004)

*Leadership practices.* There are two sources of insight about how leaders might improve the collective efficacy of their teaching colleagues. One source is the theoretical work of Albert Bandura, clearly the major figure in thinking about CTE. His work, by now widely supported empirically, identifies a number of conditions which influence the

collective efficacy of a group: opportunities to master the skills needed to do whatever the job entails; vicarious experiences of others performing the job well, and beliefs about how supportive is the setting in which one is working. Leaders have the potential to influence all of these conditions, for example, by:

- sponsoring meaningful professional development;
- encouraging their staffs to network with others facing similar challenges in order to learn from their experiences; and
- structuring their schools to allow for collaborative work among staff.

A second source of insight about how leaders might improve the collective efficacy of their teaching colleagues is the small number of studies that have inquired about the leadership practices which improve CTE. For the most part, these have been studies of transformational leadership practices on the part of principals. Evidence from these studies demonstrates significant positive effects on CTE when principals:

- clarify goals by, for example, identifying new opportunities for the school, developing (often collaboratively), articulating and inspiring others with a vision of the future, promoting cooperation and collaboration among staff towards common goals;
- offer individualized support by, for example, showing respect for individual members of the staff, demonstrating concern about their personal feelings and needs, maintaining an open door policy, and valuing staff opinions; and
- provide appropriate models of both desired practices and appropriate values (“walking the talk”).

### **Teacher Trust in Colleagues, Parents and Students**

*Concept.* Trust is conceptualized in many different specific ways. But almost all efforts to clarify the nature of trust include a belief or expectation, in this case on the part of most teachers, that their colleagues, students and parents support the schools’ goals for student learning and will reliably work toward achieving those goals. Transparency, competence, benevolence, and reliability are among the qualities persuading others that a person is trustworthy.

Teacher trust is critical to the success of schools and nurturing trusting relationships with students and parents is a key element in improving student learning. (e.g., Lee & Croninger, 1994). Dimensions of trust shown to be related to positive outcomes in school include:

- benevolence: a person’s confidence that their well being and/or things they hold dear to them will not be harmed;
- reliability: a person’s belief that individuals will act consistently in ways that are beneficial those who commit their trust;
- competence: beliefs in the ability of a person to perform consistently and up to a well-known standard; and
- honesty: including beliefs about a person’s truthfulness, integrity and authenticity; and openness.

*Effects on students.* Trust remains a strong predictor of student achievement even after the effects of student background, prior achievement, race and gender have been taken into account in some recent studies of trust in schools. Goddard (2003) argues that when teacher-parent and teacher-student relationships are characterized by trust, academically supportive norms and social relations have the potential to move students toward academic success. Results of a second study by Goddard and his colleagues (2001) provide one of the largest estimates of trust effects on student learning. In this study trust explained 81% of the variation between schools in students' math and reading achievement.

*Leadership practices.* Principal leadership has been highlighted in recent evidence as a critical contributor to trust among teachers, parents and students (e.g., Bryk, 2003). This evidence suggests that principals engender trust with and among staff and with both parents and students when they:

- recognize and acknowledge the vulnerabilities of their staff;
- listen to the personal needs of staff members and assist as much as possible to reconcile those needs with a clear vision for the school;
- create a space for parents in the school and demonstrate to parents that they (principal) are reliable, open, and scrupulously honest in their interactions;
- buffer teachers from unreasonable demands from the policy environment or from the parents and the wider community;
- behave toward teachers in a friendly, supportive, and open manner; and
- set high standards for students and then follow through with support for teachers.

### **Time for Learning**

*Concept.* Time spent learning is an obvious, although often overlooked, condition with substantial effects on student achievement. In schools which recognize the importance of how students spend their time, school schedules, timetables, structures, administrative behaviors, instructional practices and the like are all designed to ensure that students are engaged in meaningful learning as much of their time in school as possible. Distractions from meaningful learning are minimized. Students are academically engaged most of their time in school.

Early research on time for learning introduced several distinctions within the concept of school learning time. The broadest such conception, the total amount of time potentially available for learning, is a simple function of the number of days of schooling per year and the number of hours of instruction per day. Research often using student attendance data as an independent measure has assessed the effects of this concept of learning time on student achievement. Several other, more precise concepts of time for learning have also been the subject of research:

- time actually devoted to instruction: this is the potential time left for learning once unplanned events, recesses, transitions, interruptions and the like are subtracted from the total potential time;
- opportunity to learn (OTL): this is a targeted version of time actually devoted to instruction acknowledging that the content or focus of time devoted to instruction has significant effects on the nature of student learning. This time-related concept was

first introduced by Carroll (1963) in his model of school learning. Carroll's model assumes that if every student were given the necessary amount of classroom instruction time needed, relative to their individual aptitude, each would have the opportunity to succeed; and

- academically engaged time: this is the time students actually spend on their own learning within the time devoted to instruction.

*Effects on students.* Results of research about the effects of instructional time on student learning (e.g., Gump 2005; Marburger, 2006; Roby, 2004; Tornroos, 2005) can be summed up as follows:

- the total amount of time potentially available for instruction, typically measured as student attendance rates, has been reported to have effects on student learning varying from weakly significant to quite strong;
- the total amount of time actually spent on instruction has moderate effects on student learning;
- students' total amount of academically engaged time is strongly associated with student learning; and
- the content of the curriculum which students spend time studying has quite strong effects on the nature of their learning.

*Leadership practices.* There has been little direct evidence reported about leadership practices for optimizing instructional time in schools with the major exception of research on leadership "buffering". A venerable leadership practice, the value of buffering as a contribution to organizational goals is justified by evidence collected in both in schools and many other different types of organizations. In schools, buffering aims to protect the efforts of teachers from the many distractions they face from both inside and outside their organizations. Such protection allows teachers to spend their time and energies on teaching and learning.

In the case of principals, "outside" buffering entails behaviors such as running interference with unreasonable parents, supporting teachers in the discipline of students, and aligning government and district policy initiatives with the school's improvement plan (adopting initiatives that enhance the plan and ignoring those likely to move the school in a different direction). "Inside" buffering on the part of principals involves, for example, creating teaching schedules that protect time for key instructional priorities, reducing non-instructional demands on teachers during class hours, and avoiding unplanned interruptions to classes with announcements, visitors and the like.

As well as helping to optimize the instructional uses of time in school, buffering makes significant contributions to teachers' sense of efficacy, job satisfaction and to the reduction of teachers' feelings of anxiety and stress (Leithwood, 2006). These are powerful emotions with significant effects on the quality of teachers' instruction and their contributions to students' learning.

## Conclusion

This review of evidence about priorities for the next stage of the LSA project has included the identification of leadership practices valuable to principals in pursuing those priorities. Because these leadership practices have emerged piecemeal throughout earlier sections of the paper, we conclude with a synthesis and elaboration of promising LSA leadership practices. Table 1 provides an outline of such practices.

The left column of Table 1 identifies a set of “core” practices associated with successful leadership. A growing body of evidence supports the value of these practices across many different school contexts (e.g., Leithwood et al, 2006; Leithwood & Riehl, 2005; Leithwood and Jantzi, 2005; Waters, Marzano & McNulty, 2003). With several modest variations, the framework, as a whole, also serves as the foundation for the Ontario Ministry of Education’s new self-report tool for school-level leaders. The four large categories of practice include:

1. four specific practices aimed at ensuring a shared and coherent set of directions for the school;
2. three specific practices aimed at helping staff develop the capacities they will need if they are to make progress in accomplishing their shared directions;
3. four specific practices intended to align the schools “design” to its purposes; and
4. four specific practices contributing to the stability of the organization and to its smooth operation.

The right column of Table 1 notes (with an x) which of the core leadership practices were explicitly identified, in one form another, in our examination of priorities for the next stage of the LSA project. Although some core practices (modelling values and practices, allocating/aligning resources to support the school’s goals) were not mentioned, it would be a mistake to conclude that they are not relevant to LSA leadership.

Because the outline of practices in Table 1 is intended to capture the work of successful leaders in many different contexts, their description is necessarily abstract. But to be successful, the way in which each of these practices is actually enacted must be sensitive to the unique demands of the specific context in which leaders find themselves. The LSA project is one such unique context. Particular contexts, furthermore, often demand some leadership practices in addition to the four categories summarized in Table 1. The “Other” category in Table 1 lists those additional practices that emerged in our review of evidence about the five key school conditions, in particular.

How best to enact the core leadership practices summarized in Table 1, for purposes of pursuing LSA priorities during the next phase of the project, would be one good focus of attention for leadership PLCs during the upcoming year.

**Table 1**  
**A Synthesis of Instructional Leadership Practices**

<b>Core Practices of Successful Leaders</b>	<b>LSA's Priorities</b>
<b>Setting Directions</b>	
Building a compelling vision for the school	x
Developing shared goals	x
Holding high performance expectations	x
Communicating vision, goals, expectations	x
<b>Developing People</b>	
Providing intellectual stimulation	x
Supporting the efforts of individual staff members	x
Modelling values and practices	
<b>Redesigning the Organization</b>	
Developing a collaborative culture	x
Creating structures to allow collaboration	x
Building productive working relationships with parents & community	x
Connecting the school to the wider environment	
<b>Managing the Instructional Program</b>	
Staffing the instructional program	
Monitoring student learning and improvement efforts	x
Buffering staff from distractions to the school's priorities	x
Allocating/aligning resources to support of the school's vision and goals	
<b>Other Practices</b>	
Grouping students using methods that convey academic expectations	x
Providing an orderly environment	x
Establishing clear homework policies	x
Basing remediation efforts on a common instructional framework	x
Responding flexibly to challenges that arise	x
Recognizing and acknowledging the vulnerabilities of staff	x
Behaving toward teachers in a friendly and supportive manner	x

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### General

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### **Collective Teacher Efficacy**

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