

**STRONG DISTRICTS AND THEIR LEADERSHIP
PROJECT**

EXECUTIVE SUMMARY OF RESEARCH

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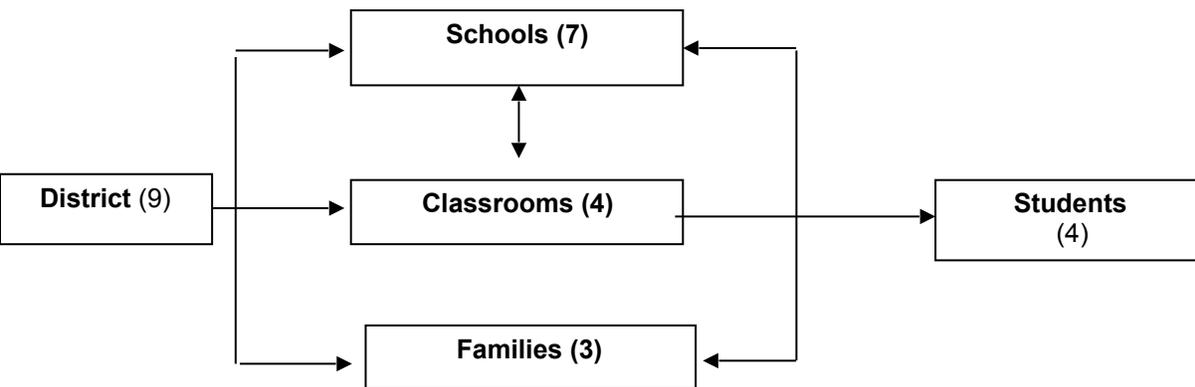
OBJECTIVES FOR THE RESEARCH

This mixed-methods study was the latest in a nine-year combined research and professional development project aimed at improving the contribution that school districts in Ontario make to student success in school. The current study replicated and extended a study of high performing districts carried out in the province in 2010 (Leithwood & Azah, 2011, 2016). Testing the efficacy of nine district characteristics identified in the 2010 study, as well as deepening understanding about the features of each district characteristic in its most effective state were among the primary objectives for this study. In addition, the study assessed the extent to which a selected set of school, classroom and family Conditions significantly mediate district effects on students (language and math achievement, well-being and engagement). Data collected by the study provided answers to 8 questions as a means of accomplishing the overall objectives for the study. Equity and human rights concerns are top-of-mind among educational policy makers and practitioners in Ontario and the framework for this study was built on evidence about what districts and schools do to provide equitable outcomes for all students.

FRAMEWORK GUIDING THE RESEARCH

The framework for the study (Figure 1) identified both primary and secondary causal relationships between three sets of variables. Nine Characteristics of high performing districts are assumed to influence student success through 12 Conditions in the school, classroom and family. These 12 Conditions also have reciprocal effects on one another and both individual and combined effects on student outcomes – math and language achievement, student well-being and student engagement

Figure 1. Framework for Study



District Characteristics included Mission, vision and goals for students, Coherent instructional guidance, Deliberate and consistent use of multiple sources of evidence to inform decisions.

Learning-oriented organizational improvement processes, Professional development for all members, Alignment, Approaches to leadership development, Policy-oriented board of trustees, and Relationships between and among all stakeholders.

Conditions in the school, as a whole, included School Leadership, Academic Emphasis, Disciplinary Climate, Safe and Orderly Environments, Collaborative Structures and Cultures, Organization for Planning and Instruction. Classroom Conditions included Instruction, Uses of instructional time, Teachers' commitment, Teacher trust in others and Collective teacher efficacy. Family Conditions (family educational culture) included parent expectations for their children's success at school, forms of communication between parents and children at home, and parents' social capital related to schooling.

METHODS

Data for the study were collected through both interviews and surveys. Hour-long interviews about the current status of District Characteristics were collected from 44 principals and vice-principals (20 from Catholic and 24 from Public school districts) selected from all regions of the province. Two sets of survey data were collected from district and school leaders in 45 of the province's 72 school systems. One survey for principals and vice-principals collected information about the 12 school, classroom and family Conditions serving as mediators in the study. A second survey collected data from both district and school leaders about the current status of the nine district Characteristics.

All student outcome data for each district were accessed through publicly available, provincial (EQAQ), on-line sources; these were data about student achievement in math and language, student engagement, and a domain-specific concept of student well-being. These data were used to create both one-year measure, as well as five-year change measure of each of the four student outcomes; the one-year measure was based on 2016 results.

Because the district was the unit of interest in this study, the small sample size (45) placed significant constraints on the types of statistical analyses of quantitative data that could be conducted to answer causal questions; correlations and a new method - the calculation of "Power Indices" were used for this purpose.

RESULTS

Data from the study provided responses to 8 questions. Quantitative data were used to answer the first 7 of these questions while interview results were used to answer the 8th.

1. On average, just how "strong" are Ontario school districts?

All nine Characteristics of Strong Districts were at least moderately well developed in the province's school districts at the time of the study. Three of the nine Characteristics were

especially well developed: Mission, Vision and Goals for Students; Budgets, Structures, Personnel Policies and Procedures and Uses of Time Aligned with the District's Mission, Vision and Goals and; Coherent Instructional Guidance. While Elected Leadership was rated among the least well- developed of the nine characteristics, there was also more variation (a larger standard deviation) in responses to this characteristic than the others.

2. How well developed in Ontario schools are those Conditions in schools, classrooms and families which prior research suggests make significant contributions to student success?

All school, classroom and family Conditions measured by the survey were at least moderately well developed in the province's schools. Safe and Orderly Environments and Teacher Commitment were the most fully developed while Classroom Instruction and Organization of Planning and Instructional Time were least well developed. There was significant agreement among respondents about these results.

3. Do those Conditions in schools, classrooms and families with demonstrable effects on student success in prior research have comparable effects in Ontario?

Language. Only Uses of Instructional Time and Organization and Planning for Instruction did not contribute to the one-year measure of Language Achievement but 11 of the 12 Conditions had non-significant negative relationships with the 5-year change measure of Language Achievement. The strongest effects on the one-year measure of Language achievement (in order) were Teacher Trust, Academic Emphasis, School Leadership, Classroom Instruction, Teacher Commitment, and Disciplinary Climate.

Math. All 12 school, classroom and family Conditions were significantly related to the one-year measure of Academic Math achievement. Similar and especially strong relationships were evident for Collective Teacher Efficacy, Safe and Orderly Environments, Teacher Trust, and Academic Emphasis. Only Uses of Instructional Time and Organization of Planning for Instruction were significantly related to five-year change measures. Four Conditions were significantly (but relatively weakly) related to the one-year measure of Applied Math

achievement – Teacher Commitment, Collective Teacher Efficacy, Safe and Orderly Environment and Collaborative Cultures and Structures.

Student Well-Being. As a whole, the 12 Conditions were moderately related to the one-year aggregate measure of well-being but not the five-year change measure. Academic Emphasis and School Leadership stand out as the most influential of the 12, although Teacher Trust and Collective Teacher Efficacy also had significant but relatively weak relationships with well-being. The five-year aggregate measure of well-being was significantly related to Academic Emphasis and Organization and Planning for Instruction. School Leadership and Academic Emphasis were also significantly related to well-being in language, but none of the 12 Conditions was related to change-over-five-years in language well-being.

As compared with well-being in language, school, classroom and family Conditions played a much more influential role with well-being in math. Ten of the 12 Conditions were significantly related to the one-year measure of this outcome and 5 of the 12 Conditions were significantly related to the change-over-five-years measure.

Student Engagement. Results also point to the significant role that a large handful of school, classroom and family Conditions has on student engagement. While the influence of School Leadership, Academic Emphasis and Family Educational Cultures stand out in relation to most measures of engagement, Teacher Trust, Collective Teacher Efficacy and Safe and Orderly Environments constitute a weaker but still significant set of influences.

4. To what extent do each of the Characteristics of Strong Districts influence those Conditions in schools, classrooms and families with demonstrable effects on student success?

Considering the correlations, it is reasonable to claim that at least seven of the nine District Characteristics are important influences on the majority of the 12 school, classroom and family Conditions. Most of these seven are significantly related to multiple Conditions while two district characteristic appears to influence only one: Mission, Visions and Goals for Students had a significant effect on Academic Emphasis while Coherent Instructional Guidance had a

significant effect on Disciplinary Climate. None of the nine district characteristics were significantly related to School Leadership, Uses of Instructional Time, Organization and Planning for Instruction, and Family Educational Culture.

5. How large are the direct and indirect effects of the nine Strong District Characteristics on student success?

Direct effects. Seven of the nine district characteristics (all but Professional Development and Elected Trustees) had significant direct effects on the one-year measure of Language achievement. Two of the nine characteristics had significant effects on the one-year measure of Math achievement (Mission, Vision and Goals for Students and Coherent Instructional Guidance). None of the nine district characteristics had significant direct effects on measures of student well-being or student engagement.

As compared with the results of the 2010 study, these results are approximately similar for the 1-year measures of achievement in math and language. However, in the 2010 study, five district characteristics had significant relationships with five-year change scores in both math and language while none of the district characteristics had such effects in the current study.

Indirect effects. Within the constraints of what was measured by this study, what do the results suggest are the most promising indirect paths for districts to follow in their efforts to improve their students' math achievement? Results point to three paths (with labels adopted from LSA's theory of action) districts should consider as part of their math improvement strategies.

The most powerful of these paths (the Emotions Path) includes a cluster of three teacher dispositions - Teacher Trust, Collective Teacher Efficacy, and Teacher Commitment – hence the “Emotions” label. All nine district characteristics have some influence on the cluster of Conditions defining this path. So, work toward improving any of the nine district characteristics should be done in ways likely to instill Teacher Trust, Commitment to their district's expectations for student achievement in math along with a sense of Collective Efficacy about accomplishing those expectations. High levels of trust and commitment will be promoted by transparency about existing approaches to math instruction, motivation to work with others to find more effective

practices and willingness to risk trying promising new practices. Teacher Trust and Commitment will develop to the extent that teachers understand and share the district's expectations for student success in math and participate in district decision making about the most promising approaches to math instruction. Teachers sense of Collective Efficacy will develop as teachers come to believe that the professional development available to them contributes to the capacities they need to improve math achievement among their students and that the district's policies, procedures and allocation of resources are closely aligned with - and enable - their efforts to improve students' math achievement.

A second less powerful cluster of related Conditions (the Organizational Path) includes Safe and Orderly Environments and Collaborative Cultures. Six of the nine district characteristics have some influence on these two Conditions. District efforts to improve student math achievement should include explicitly embedding instructional expectations about math in districts' visions, missions and goals for students, providing coherent but flexible instructional guidance to schools about math instruction, especially guidance that is "balanced", that is, guidance that includes both district advice about promising instructional practices and considerable local autonomy about whether and how to implement those practices. This path relies on the use of multiple sources of evidence to (a) identify those components of the math curriculum needing focused attention (b) locate evidence about the most promising approaches to instruction related to those components and (c) monitor the challenges and successes associated with implementing improved math instruction in classrooms.

The third and least powerful, but still significant, of the three clusters of related Conditions (the Rational Path) includes Academic Emphasis and Classroom Instruction. Four of the nine district characteristics have some influence on these two Conditions. Two of these district characteristics also influence the Emotions Path and two the Rational Path. Clearly, Mission, Vision and Goals for Students, Coherent Instruction Guidance and Uses of Multiple sources of Evidence are an especially critical sub-set of the nine characteristics for districts aiming to improve their students' math achievement.

6. How large are the direct and indirect effects of School Leadership on student outcomes?

All relationships between School Leadership and the other 11 school, classroom and family Conditions were moderately to highly significant. While this confirms much earlier evidence about the key role of school-level leadership, it also points to a challenge for district leaders since none of the nine District Characteristics had any appreciable effect on School Leadership. While some districts in the province are undoubtedly providing their school leaders with productive development experiences, on average, Ontario districts seem to be making very little contribution to the quality of their school leaders, as described by the practices included in the *Ontario Leadership Framework*, or they are doing so in ways not measured by this study.

7. Is there a significant relationship between student achievement in math and language and student well-being and engagement?

Results concerned with well-being indicate mostly moderate to strong relationships between both one-year and change-over-five-years achievement scores in mathematics (Academic and Applied) and a significant but weak relationship between one-year well-being scores and one-year language scores. One-year engagement scores are moderately to strongly related to one-year language and one-year math achievement only.

In sum, while both well-being and engagement are positively related to some measures of achievement, well-being and math achievement are especially tightly linked.

8. How do school leaders understand the work of their districts and its contribution to their own school improvement efforts?

Data used to answer this question were provided by 44 interviewees, 22 of whom were from elementary schools and 12 from secondary schools. Interviews asked about the status and value of each of the nine district Characteristics as enacted in their own districts.

Mission, Vision and Goals for Students. The modal process in districts for creating a widely shared Mission, Vision and Goals for Students included significant participation by most stakeholder groups, including diverse groups of parents and students. For some stakeholders this participation was direct, through membership on a strategic planning committee, for example, while others participated by responding to surveys often online.

If statements intended to capture district priorities are to be useful to school leaders, furthermore, they must be memorable and meaningful, as well as a constant part of the conversation - in principals' meetings, with trustees and other contexts about priorities. A useful district statement of directions and priorities serve as key criteria used in decision making and continue to evolve in order to remain relevant to Conditions in schools which, of course, also evolve. Useful approaches to this Strong District characteristic also entail careful alignment between ministry priorities and district improvement plans, as well as alignment between district plans and school improvement plans

Coherent Instructional Guidance. This Strong District characteristic encompasses efforts by districts to encourage all schools to use, either similar approaches to instruction or approaches which schools themselves could credibly justify as “effective. This district characteristic allows for centrally determined approaches (“low discretion”), as well as approaches that rely on considerably more discretion and control by school leaders, although not complete autonomy (balanced discretion). Interviewees provided examples of both approaches.

Two examples of low discretion approaches were described by interviewees. Although providing little discretion for staffs, the two examples were viewed as quite helpful. A small number of respondents, however, were concerned about loss of autonomy in local decisions about instructional improvement. The remaining interview evidence described approaches that aimed for a balance of central direction and local autonomy; central control over the priorities for improvement and considerable autonomy, with district support, for school leaders to decide how those priorities were to be enacted in individual schools. Most of these balanced discretion approaches made considerable use of district improvement plans, regularly reviewed district priorities with school leaders, emphasized instructional forms of leadership and carefully aligned professional development with district and school priorities.

Deliberate and Consistent use of Multiple Sources of Evidence to Inform Decisions. Interviewees described their districts' practices as including collaborative analysis of provincial test data across the district and in schools, extending the types of data used for school improvement, and expanding the focus of data beyond ends to means. Interviewees also reported their districts

attempting to make data more accessible to schools and providing significant resources to support use of data in schools. These district efforts, according to many interviewees, had increased their capacities to understand and work effectively with data in their schools, to be more precise in determining the focus of their school improvement efforts, to be more transparent about the work of schools and to be more accountable about that work. Increased access to, and use of data, also helped school leaders justify requests they might make to their district for increased resources.

Learning-oriented Organizational Improvement Processes. Respondents described the processes in their districts used for creating and implementing district and school improvement plans in light of district strategic plans. These processes were viewed as especially helpful by school leaders when they: provided quick access to help from district staff; helped to clarify district priorities and fostered ongoing dialogue in the district about those priorities; and allowed considerable autonomy for schools in their school improvement efforts. District improvement processes were also valued by school leaders when they allowed for and encouraged a sustained focus on a small number of priorities, broad participation in improvement efforts and targeted support for school improvement efforts.

Professional Development for all Members. Respondents identified widely varied sources of professional development sponsored by their districts. While the bulk of interviewees valued approaches that allowed for considerable autonomy and control at the school level, evidence suggests that even centrally determined and delivered PD could allow for adequate autonomy if those experiencing it took the initiative to use what they learned in their own contexts. Done well, central district sponsorship brings with it access to expertise unlikely to be available to individual schools; done poorly it can be insensitive to the needs of staff and the improvement challenges faced by schools. Done well, job-embedded PD brings with it close knowledge of local challenges and access to peers with relevant professional know how that can be turned to solving individual problems; done poorly, it can be blind to useful ideas found outside the local group and increase resistance to change. It may be that encouragement of networks and

individual responsibility for one's personal professional development are still underutilized forms of district-sponsored PD.

Budgets, Structures, Personnel Policies and Procedures, and Uses of Time Aligned with the District's Mission, Vision and Goals. Alignment across many aspects of the district organization make important contributions to the improvement work of school leaders. District alignment increases chances of accomplishing goals and priorities, reduces distractions from those goals and priorities, provides staff with more confidence about the value of their work, facilitates collaboration among school leaders, clarifies accountability, increases access to district support for school goals and priorities and improves school planning. Evidence from interviewees suggests that many districts in the province had been working hard to improve alignment among different aspects of their organizations, for example, alignment across district goals, budgets, personnel policies, and allocation of professional development resources. Indeed, interviewees identified, as important to their work, many more features of districts to be aligned than the framework for the study had anticipated.

Only two areas of district functioning were cited by significant numbers of respondents as in need of more alignment effort, alignment of available time with expectations districts had for the attention of schools, and the alignment of expectations for schools among different district offices which were viewed by some respondents as "silos".

A Comprehensive Approach to Leadership Development. Interviewees responded to questions about leadership recruitment, selection, initial preparation, and both the professional development and performance appraisal of incumbent leaders. The bulk of respondents identified recruitment by their districts as consisting of either or both the provision of experiences aimed at giving prospective leaders a good sense of what is entailed in doing the job and "tapping on the shoulder" (including encouragement by principals). Districts were selecting people who had demonstrated an interest in leadership roles by inviting them to enroll in a formal leadership development program, by creating a "pool" in which those considered potentially suitable would be placed for consideration as positions became available. Several districts also provided

aspirants with an application package to complete, followed by an interview. Most districts took into account the recommendations of the aspirants' principals.

Districts provided successful applicants with two forms of initial preparation, on-the-job leadership opportunities and formal professional development. Continuing professional development for those already in formal leadership positions including formal programs, as well as professional development during regularly scheduled administrator meetings. As with appraisal processes, these forms of support seemed to be increasingly valuable as they were directed at the specific challenges facing individual school leaders and as they were available in a very timely manner. ("just-in-time PD"). Some form of periodic formal performance appraisal of school leaders was carried out by most districts. But relatively frequent and problem-focused interactions contributed more to school leader growth than formal appraisal processes conducted much less frequently.

A Policy-oriented District of Trustees. School leaders had a general understanding of the official policy-oriented role of trustees although there was wide variation among respondents in their familiarity with what that entailed. Direct contact with trustees occurred when trustees were in schools. This occurred sometimes as part of pre-planned visits but more frequently through trustees' attendance at school-sponsored events. Some respondents viewed trustees' function at these events as largely social while others understood their trustees to be digging deeper into the needs of the school and the views of parents so that their work at the district table would be better informed.

Productive Working Relationships with Staff and other Stakeholders. Relationships among district leaders and between the district leadership team and school leaders were typically viewed as quite positive. These positive relationships, described as open, accessible, collaborative, respectful, trusting and caring, for example, were the result of a widely shared, coherent sense of direction, good personnel choices by the director and others involved in hiring, as well as organizational size (small districts were viewed as having advantages for establishing good relationships).

About relationships with parents, most respondents reported their districts to offer few specific initiatives for school engagement with parents. Instead, districts more generally advised school leaders to engage parents in school decisions, acknowledge parents as partners in the education of their children, adhere to the district’s communication policies with parents, and keep in mind the very different Conditions in which students and their parents found themselves. These results indicate that many districts in the province have yet to consider the emerging evidence about forms of school-parent engagement that significantly contribute to student success at school.

RECOMMENDATIONS

This section includes nine recommendations for the consideration of district leaders and two recommendations for revising the *Ontario Leadership Framework*.

One of the overall goals of the study was to determine the extent to which the results of the 2010 study about the direct effects of the nine district characteristics on student math and language achievement could be replicated. Results of this study did replicate the results of the 2010 study for five of the nine district characteristics and provide justification, not found in the 2010 study, for Professional Leadership and Learning-oriented Improvement Processes.

- 1. Results of the study add confidence about the efficacy of the nine Characteristics of Strong Districts. District leaders should continue to use these characteristics as a framework for their district improvement efforts.*

Among the most important results from this study is evidence of significant effects, on most of the student outcomes included in the study, of all 12 school, classroom and family Conditions serving as mediators of district effects. These results are entirely consistent with much evidence collected in many other contexts. The quantity and consistency of these finding overwhelms evidence available about other “levers” for change such as specific programs, for example. This evidence justifies four recommendations for district leaders to consider:

2. *Districts should set, as a priority for supporting the improvement work of their schools, learning more about how to improve the status of the 12 Conditions included in the study and developing resource material that school can use in their efforts to further develop selected Conditions as part of their school improvement efforts.*
3. *Districts should reflect the important contribution to student success of the 12 Conditions by including specific training for school leaders in how to diagnose and improve the status of each of the Conditions in their organizations.*
4. *Districts and their schools should avoid an exclusive focus on any one of the 12 Conditions on the grounds that it is some sort of “silver bullet” for all schools. All 12 Conditions have the potential to significantly help improve student success and the choice of which one or several to focus on at a given time should depend on judgements about what would be most helpful in individual school contexts.*
5. *Evidence reported in this study about the relative effect on students of each of the 12 Conditions should be reflected in the priority districts attach to improving Classroom Instruction. The effect on student outcomes of Classroom Instruction is less than the effect of Teacher Trust, Academic Emphasis and School Leadership and about the same as Teacher Commitment and Disciplinary Climate. Districts that have devoted considerable resources already to improving Classroom Instruction should consider the marginal effects of spending additional resources on improving Classroom Instruction, as compared with spending those resources on improving one of the other high impact Conditions that might not yet have been given much attention.*

As one of the Conditions included in the study, School Leadership made the most consistently significant contributions to student math and language achievement; it was also one of only four of the 12 school, classroom and family Conditions to have significant effects on student well-being, and had the largest effect on student engagement of any of the Conditions. These results reinforce the results of much previous research about the critical role of School Leadership in improving student success and turning around underperforming schools.

Since the study's measure of School Leadership was based on those practices included in the *Ontario Leadership Framework* (OLF) these results also provide further confirmation of OLF's validity. However, our analysis of the effects of the nine district Characteristics on the 12 Conditions revealed no significant effects on School Leadership. This does not mean, of course, that no districts are influencing the development of their school leaders in directions described by the OLF. However, it does mean that, on average, districts are having little effect on School Leadership. This warrants a recommendation closely related to the previous four:

6. Districts should reassess what they are doing to nurture the development of their school leaders ensuring that the explicit focus of their development efforts are consistent with the practices described in the OLF and that the means they are using for leadership development are as effective as possible. There is likely no single improvement focus for a district that will make as large a difference to its performance as a focus on School Leadership development.

None of the nine district Characteristics had a significant influence on Family Educational Culture. Interview data collected from school principals and vice-principals, furthermore, indicated that while many districts expected schools to treat relationships with parents as important and to acknowledge the diversity of family circumstances, none of their districts provided specific advice to schools about how to engage parents in ways that evidence suggests fosters student success. However, evidence from this study indicates that Family Educational Culture makes moderately strong contributions to both language and academic math achievement. There is considerable evidence from other sources which also makes this case, including evidence collected by the LSA project in this province.

7. In light of provincial priorities about both equity and building support for public education, districts should encourage especially schools serving children from families facing serious social and financial challenges to include, as part of their improvement work, the development of those three elements of family cultures known to matter for student success (parent expectations, communication between parents and children in the home, and parents' social capital related to schooling). A key resource for districts taking up this recommendation will be the results of a recent provincial study, sponsored by CODE and the Ministry of Education,

identifying successful strategies schools and districts can use for this purpose (Leithwood & Patrician, 2015).

Based on the calculation of Power Indices, seven of the 12 school, classroom and family Conditions had significant direct effects on student math achievement and point to three distinct paths that districts are pursuing with some success in their math improvement efforts. The most powerful of these paths includes a cluster of three teacher dispositions - Teacher Trust, Collective Efficacy and Commitment, a combination we label the Emotions Path. The impact on students' math achievement of the Emotions Path, one of the most visible and surprising results of the study, points to relatively "soft" but powerful addition to the math improvement strategies of many districts.

While professional development for teachers aimed at increasing their pedagogical content knowledge about math instruction is an example of a "hard" and no doubt valuable part of any district math improvement strategy, our findings about the contribution of the Emotions Path helps to explain why, in this study, district professional development demonstrated such weak effects. Absent a sense of trust in others, many teachers are reluctant to try new forms of instruction in their classrooms. Absent a sense of collective efficacy, many teachers lack confidence in their ability to solve the inevitable challenges they anticipate from changing their practices. Absent a sense of commitment to math as a priority, many teachers are inclined to emphasize, in their teaching, those components of the curriculum with which they are comfortable and continue to downplay components about which they are uncertain. Overlooking the power of the Emotions Path may help to explain why many districts in the province continue to experience disappointing results from their math improvement efforts.

8. Districts should assess the extent to which all dimensions (or characteristics) of their work is carried out in ways that nurture the trust, efficacy and commitment of their teaching force.

Evidence from this study indicates that four of the 12 Conditions have significant effects on student well-being, including (in order of strength) Academic Emphasis, School Leadership, Teacher Collective Efficacy and Teacher Trust in others. It is important to remember that the measure of well-being used in this study was "domain specific", it was a measure of students'

sense of well-being related to the demands and successes they faced at school about their work in math and language, not a more holistic sense of well-being. These results suggest that:

9. Schools and districts aiming to improve domain-specific conceptions of student well-being should include, as part of their improvement efforts, increasing the status in their schools of Academic Emphasis, School Leadership, Teacher Collective Efficacy and Teacher Trust in others. These are Conditions that also influence math and language achievement, suggesting that there is no need for special initiatives aimed at improving students' domain-specific well-being. What will be effective for improving achievement will also be effective for improving well-being.

Results of the interviews conducted, as part of the study, with 48 school leaders from most sectors of the province provide a rich source of information for assessing and revising detailed descriptors of each of the nine district characteristics included in the district portion of the Ontario Leadership Framework.

10. Those responsible for future revisions to the district portion of the OLF should carefully mine these interview data for possible revisions, along with whatever other evidence they believe to be relevant.

One of the study's most consistent and striking results was the substantial contribution of school-level leadership to all four student outcomes serving as dependent variables for the study. The measure of school leadership used in the study was based directly on the leadership practices included in the school-level section of the *Ontario Leadership Framework*. Although not an initial objective for the study, these results provide remarkably compelling, original empirical support for the validity of the OLF's leadership practices. While many national and sub-national education jurisdictions now have their own sets of leadership standards or frameworks, to our knowledge none have provided direct empirical evidence, of the sort this study provides for OLF, to justify their standards.

11. Those responsible for revisions to the school-level portion of the Ontario Leadership Framework should carefully weigh the evidence provided by this study before making

significant changes. The integrated model of leadership reflected in OLF's leadership practices seem to make remarkable contributions to student achievement, well-being and engagement.

PRODUCTIVE NEXT STEPS FOR STRONG DISTRICT WORK IN ONTARIO

Results of the research described in this report, as well as considerable feedback from district leaders in response to the Professional Development modules, suggests three sets of next steps that would be productive additions to Strong District work in the province

Resource Documents

1. Preparation of a “handbook” for districts to use when working toward improving the knowledge of school leaders about the 12 conditions. This would include a detailed description of each Condition in its most desirable state, along with leadership practices known to be useful for improvement purposes; it would also include illustrations of what such leadership looks like in practice.

Many senior leaders have asked for assistance for their school leaders in diagnosing the status of the 12 conditions in their schools. This diagnostic assistance could also be part of a handbook.

2. Development of a book-length account of high-performing school systems largely organized around the nine characteristics but including illustrations and additional related research. This would be a “how to” book for senior school leaders and possibly a text to be used in supervisory officer certification programs.

Professional Development

3. While attendance at the Strong Districts modules this past 12 months was quite impressive, many senior leaders we have spoken with assume the availability of this PD program will continue through another cycle. Very few senior leaders have participated in more than one or two of the modules. So there seems to be a need and desire to provide another round of PD based on our work to date and, in the process, further improve the resources that are now part of the modules.

Research

4. The Strong District study did not set out with the objective of testing the OLF but it did provide such a test, nevertheless. This test adds considerable justification for continued uses of the OLF in Ontario. Nonetheless, a study with the school, rather than the district, as the unit of analysis has the potential to add much more power to the evidence now available, as well as lead to evidence - based refinements. This is important to do given the priority the province now attaches to improving math performance and student well-being, both of which, we now know, are important outcomes of OLF-based school leadership. In addition, although the OLF has been widely adopted in Ontario, it has also received considerable positive attention in other jurisdictions internationally. New research with a more robust design would place Ontario's claims about the efficacy of its leadership framework in another league, as compared to jurisdictions elsewhere.

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