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Characteristics of High Performing School Systems in Ontario

Executive Summary Report

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Purposes

This report summarizes the results of a study which identifies key features of high-performing Ontario school systems, defined by their contribution to student achievement, and describes how several of these systems came to be high performing. Results of the study provide the most direct source of justification for a *District Effectiveness Framework* (DEF) to be added to the *Ontario Leadership Framework.*

In addition to this Executive Summary, results of the study are reported in four additional documents: a non-technical Final Report; a much more detailed Technical Report; a series of Appendices (including the instruments used for the study and extended data analysis results) and; the *District Effectiveness Framework* (DEF).

Framework

School system characteristics framing the study emerged from three recent syntheses of evidence about school system features which influence their success in improving student learning. Because all three syntheses were based primarily on U.S. data, the initial version of the framework was modified to reflect the policy context and wider environments in which Ontario school systems found themselves at the time of the study.

Four broad categories or dimensions of school system characteristics, each of which include from two to four more specific characteristics (12 in total), were included in the framework. Capturing the best available evidence about key aspects of what successful school systems do – the processes in which they engage - to improve student achievement, the characteristics are as follows:

Core Processes, as the label implies, are those characteristics of school systems that have the most direct effect on the quality of teaching and learning including:

- Creating widely shared system directions (mission, vision, goals for students);
- Building curricula and instruction capable of achieving system directions;
- Ensuring the use of systematically-collected evidence to inform decisions and help solve problems throughout the system.

Supporting Conditions enabling the Core Processes include:

- Organizational improvement processes such as strategic, board and school improvement planning;

- Professional development for all staff in relation to the capacities they need to help accomplish the system's directions;
- Alignment of system policies and procedures in support of system directions.

Relationships among those in the system and between the system and external stakeholders including:

- Internal system and system-school relationships;
- Relationships between the system and parents;
- Relationships between the systems and external (mostly local) community groups);
- Relationships with the Ministry of Education.

Leadership from two distinct sources:

- Professional leadership, especially the leadership of superintendents and directors;
- Elected leadership provided by the board of trustees.

Methods

This was a "mixed-methods" study. Quantitative methods were used for a large-scale empirical test of the extent to which characteristics of high performing school systems explained variation in four estimates of student achievement– changes in math and language achievement over five years and 2010 average annual math and language achievement. Achievement measures were those collected by the province's testing agency (EQAO) including results at grades 3 and 6 in math and language (combined reading and writing scores), grade 9 in academic and applied math and grade 10 in language.

Data measuring the status of system characteristics were collected with two separate, online, surveys administered to central office leaders and principals in 49 of the province's 72 English and French speaking school systems. Responses were received from:

- 1543 principals (approximately 33% of the total province's principal population and about 44% of the principals in districts that chose to participate in the study);
- 235 system leaders (approximately 44% of all superintendents and directors in the province and about 59% of those in participating school systems) in 52 school systems (72% response rate).

Case study methods, primarily interviews but including some document analysis, were used with trustees and both system- and school-level leaders, to provide an in-depth understanding of three high-performing school systems and how they got to be that way. These systems were selected because they had made exceptional progress with their students' achievement over a five-year period beginning from different starting points - below average, average and above average, as compared with the province, as a whole.

Both the survey instruments and interview protocols used to collect data for the study explicitly asked about the status of those school system characteristics included in the framework.

Effects of School System Characteristics on Student Achievement

The quantitative portion of this study describes the current status of system characteristics across all 49 systems providing such data and examines the effects of these characteristics on student achievement. This section, highlighting the latter of these two analyses, summarizes relationships between variation in each of the twelve school system characteristics and four measures of student achievement. While results in the main reports of the study take the form of correlations and effect sizes[1], this summary is limited to a narrative, non-numerical description of the evidence.

The Four Categories: Considering just the four broad categories of school system characteristics, results indicate that:

- *Core Processes* are significantly associated with achievement change scores, as well as 2010 annual achievement scores;
- *Supporting Conditions* also are significantly related to both change scores and 2010 annual achievement scores;
- Neither *Leadership* nor *Relationships* are significantly related to change or annual achievement scores, although individual school system characteristics within both of these categories do have significant relationships with achievement, as reported below.

Core Processes: All three Core Processes have significant relationships with some measures of achievement.

- *Curriculum and Instruction* is significantly related to three of the four achievement measures;
- *Beliefs and Vision for Students* also is significantly related to three of the four measures.
- *Evidence Use* (as reported by principals but not system leaders) is significantly related to all four achievement measures.

These results conform closely to what would be expected conceptually – greatest influence on student achievement from the school system characteristics most directly experienced by students.

Supporting Conditions: Results indicate significant relationships with achievement in the case of two Supporting Conditions:

- *Alignment* is significantly related to all measures of achievement except change in math.
- *Professional Development* is significantly related to the two language scores but neither of the math scores.
- *Organizational Improvement Processes* make almost no contribution to either annual or change achievement.

Relationships

- *Internal relationships* are significantly related to both math achievement and literacy in some grades;
- *Relationships with parents* are significantly related to three of the four achievement measures;

[1] An effect size statistic aims to describe the practical significance of a relationship, unlike a correlation which might be very weak, but statistically significant by virtue, for example, of a large sample size.

- *Local community relationships* are significantly related to some annual measure of math achievement;
- *Relationships with the Ministry of Education* has very small but significant effects (.05) on annual math achievement results.

Leadership: Neither Professional nor Elected system leadership, according to these results, has a direct impact on student achievement. These results, however, are consistent with current conceptualizations of leadership as having only indirect effects on students, effects mediated by other variables closer to the student's experiences[2]. Consistent with this view, results do indicate that both sources of leadership have moderate to strong effects on many of the other system characteristics that are related to achievement. More specifically:

- both sources of system leadership have moderate to strong effects on, or relationships with, all three remaining categories of system characteristics and many of the ten individual characteristics included in those categories;
- the combined effects of Professional and Elected leadership range from moderate, in the case of Curriculum and Instruction, to strong in the case of Organizational Improvement Processes;
- Professional leadership has a consistently larger effect that does Elected leadership on all but two system characteristics (Beliefs and Vision for Students, Internal Relationships).

Evidence summarized in this section has painted an influential picture of school system effects on students[3]. Furthermore, results indicate that school system leaders have quite significant effects on features of their organizations which are known to improve student achievement. The only evidence of its kind to provide such a direct test of school system characteristics and leadership on student achievement, these results offer considerable justification for ensuring that district –level organizations and their leaders are close to the heart of any province-wide educational reform effort.

How School Systems Improve Student Achievement

The qualitative data collected in three exemplary school systems and summarized in this section were intended to illustrate both the meaning of the twelve system characteristics and how they are developed over time. Results provide a "bird's eye" view of similarities in how the three systems went about improving their performance, even though there were important differences among them, as well.

Core Processes

System Directions (Mission, Vision and Goal): All three systems had developed a vision, mission and set of shorter-term goals that had become widely endorsed among trustees, as well as both system- and school-level leaders. Few people interviewed for the study had any doubts about the importance of these directions and just about everyone providing data for the study appeared to have a firm understanding of what their system was attempting to accomplish. The processes through which such wide-spread knowledge, agreement and commitment were

[2] See, for example, Hallinger & Heck (2010) and Leithwood, Patten & Jantzi (2010)
[3] At least within the limits of what is possible with correlational data.

developed typically began in some formal goal setting process associated with "strategic planning". Two of the three systems had adopted a "policy governance" model (or "corporate" model) to guide trustee work, along with a strategic planning process that was largely responsible for both the clarity of system purposes and both the development and maintenance of staff commitments to those purposes. The outcomes of such goal setting events increased in importance among system members as the systems took steps to embed the goals in annual improvement plans, monthly principals' meetings and leadership-initiated interactions in schools. The mission, vision and goals were "brought alive" and sustained through such consistent use as decision- making tools and as beacons for the future.

*Curriculum and Instruction***:** Over the five-year period of interest to the study, approaches by the three systems to improving curriculum and instruction changed quite significantly. These changes included greater collaboration across the system for school improvement purposes, greater consistency in priorities and expectations, and significant increases in support by system leaders for improvement work in schools. These changes also included much greater use of systematically-collected evidence for decision making and more precise targets for school improvement. Expectations for instructional leadership from principals also increased quite substantially across the three systems; principals were expected to have close knowledge of instruction in their schools' classrooms and considerable influence on its direction. Capacities for such leadership were developed with considerable system support. Developing "deep understanding" (achieving higher order curriculum goals) had become an increasingly important focus for the three systems.

Uses of Evidence: Dramatic increases in the use of systematically-collected data and research literature to guide board, school and classroom improvements was one of the most important explanations for the achievement gains made by their systems. Conversations between superintendents and both principals and teachers became much more precise and specific, as a result, and most principals viewed their superintendents as partners and close collaborators. EQAO testing, the development of "policy governance" approaches by trustee to their work, and increasingly powerful processes for both holding schools accountable for student achievement and supporting that work were major stimuli for increases in the use of robust evidence for decision making. There was considerable growth over the five-year period in staff understandings and uses of data to inform decisions; staff learned how to interpret data and how best to use it for decisions. Leadership teams and teachers were provided time to think through what their data meant.

Supporting Conditions

*Organizational Improvement Processes***:** All three systems used some form of strategic planning process as a starting point and touchstone for developing and monitoring progress with a board improvement plan. School-level improvement plans were expected to build on and be consistent with board improvement plans and priorities. Board and school improvement processes aimed at moving toward the system's directions were highly interdependent and very "organic". Both board and school goals and priorities remained constant over significant periods of time but the actions taken to accomplish those goals and priorities were constantly assessed and refined. In these systems, board improvement planning, school improvement planning and the implementation of those plans became increasingly interdependent, data driven and continuous. The ongoing monitoring and refining of school improvement processes was enabled

by transforming monthly meetings of school and system leaders from an operations focus to an opportunity to assess and refine these plans and to engage in relevant professional development.

Professional Development: Extensive professional development was provided for teachers in the three systems. There was a significant shift over the five-year period in the content of professional development for teachers; the content of moved from some combination of centrally-determined and/or preference-based PD content to a very close alignment of PD content with the capacities needed to achieve board and school priorities. Identification of that content typically arose from examinations of evidence about what was working and not working, with PD initiatives aimed at remediating what was not working.

The delivery of much of that PD, especially for teachers, also shifted from locations outside of schools, to a much larger proportion of it being "job-embedded" – undertaken in school or school-like contexts where newly acquired capacities had to be implemented if PD was to make much difference.

Alignment: Allocation of resources became increasingly aligned with the boards' focus on improving instruction and student achievement in all three systems. Almost all principals in the three systems believed that their systems now provided them with as much support as they requested. In almost all cases, principals' requests for additional resources were not only approved but provided very quickly. These systems also had aligned their personnel resources around their main priorities.

Leadership

Professional System Leadership: The systems shared much the same view of what they were seeking in their new school leaders. While the three systems were significantly different in their approaches to recruitment, selection, preparation and appraisal of school leaders, the qualities they were seeking in their school-level leaders and prospective leader were much the same. Many of these qualities, respondents noted, were included in the *Ontario Leadership Framework*. System leaders needed to be adaptable and flexible, maintaining multiple priorities at the same time and able to collaborate productively with others. Interviewees said that these leaders also needed to have broad experience, refined relationship skills, and the ability to add value to the conversations and decisions of the senior leadership team. Commitment to "Catholicity" was a very important quality for all leaders and prospective leaders in both Catholic systems. Preservation of the French language and culture was an added priority for CECC.

Elected System Leadership: Central office leaders and trustees were asked a series of questions about the work of trustees. These questions were asked during the same period in which the provincial Ministry of Education was developing new policy about school board governance, a policy aimed at sharpening trustees' accountability for student achievement and limiting their roles to policy development and evaluation. Data collected for the study reflect this provincial context. In all three systems trustees focused most of their attention on board policy and concerned themselves with ensuring the board mission and vision drove the system's improvement efforts, along the lines of the "policy governance" model. This model was most closely adhered to in two of the three systems, having been adopted many years earlier, considerably ahead of provincial policy on this matter.

Relationships

Internal System Relationships: Relationships among system leaders in all three systems were very strong and relationships with principals were uniformly described as open,

collaborative and accessible. Central office leaders in all three systems seemed able to balance a quite demanding focus on high expectations with "servant leadership"- like orientation to relationships within their systems' schools. Signaling a sense of reciprocal accountability for meeting shared goals and high expectations, this orientation seems at least partly responsible for the high levels of relational trust evident among schools and with central office leaders in the three systems.

Relationships with Local Community Groups: A wide range of such groups were connected to almost all schools in each system. While most principals spoke approvingly of these and other system efforts to establish good relationships with external groups and agencies, few believed that this was a new development. However, the evidence about both parents and other community stakeholders suggested much less social and psychological distance (more reciprocity) between the schools and those it served than is often the norm.

Relationships with Parents: Relationships with parents had clearly grown in importance over the five-year period of interest to this study; all three systems attributed considerable importance to engaging parents in the education of their children. Leaders in these systems attempted to encourage such engagement through their schools, as well as through system-wide initiatives directed toward parent engagement. But whether system efforts were viewed as successful or not, they did influence principals' beliefs about the priority awarded to parent engagement by their system leaders and the high expectations system leaders held for the parent engagement initiatives of schools.

Relationships with the Ministry of Education: Relationships with the Ministry of Education varied significantly among the three school systems and in several cases, from the perspectives of trustees, as compared with professional system leaders. Ministry relationships were generally regarded as very positive by two of the systems but not the third. Most appreciated by the systems were relationship with regional office staff and efforts of the Literacy and Numeracy Secretariat, including some of the improvement tools and processes it had created (e.g., the *School Effectiveness Framework*, the *Schools in the Middle* project and "fresh eyes" provided by Ministry personnel reviewing board improvement plans).

Conclusions

Results provide considerable support for most of the school system characteristics included in the study's framework and illustrate how a small sample of high performing Ontario districts both developed these system features. In combination with prior research and feedback used to help identify them initially, this evidence provides strong justification for using the system characteristics examined in this study as the basis for the province's *District Effectiveness Framework.*

The more detailed account of results contained in the Final Report and Technical Report outline a relatively extensive set of implications for school leaders wishing to further develop their school systems. Nonetheless, while most of the system characteristics included in the framework for the study are significantly related to important student-related outcomes, it is not likely necessary for school leaders to "do everything". The study does point to the importance of creating widespread support for the system's directions early in the improvement process, but it does not have much to say about what to do next, or what to emphasize most in the face of the unique circumstances and histories found in every system in the province. It will come as no

surprise to any system leader that considerable judgment still needs to be exercised if the results of this study are to add value to the effectiveness of their leadership.