# PRINCIPAL LEADERSHIP AND SCHOOL EFFECTIVENESS: VARIABILITY AND CONVERGENCE IN PRACTICE
## (Summary Paper)

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Ontario's Education Quality and Accountability Office (EQAO) has been charged with the responsibility of evaluating the academic achievement of Ontario's students since 1986. This occurs primarily through the annual administration of standardized assessments that are aligned with the Ontario curriculum and performance standards in reading, writing and mathematics and are administered at the end of the primary years (Grade 3) and junior years (Grade 6) in elementary schools, and at the end of Grade 9 (mathematics) and Grade 10 (literacy) in secondary schools. The outcomes of these assessments are intended to assist school system personnel at the school and board levels with the identification of needs, goals and plans for improvement in student learning, and to inform the public about the status of school performance. Furthermore, results on the EQAO's standardized assessments identify schools with higher student performance and schools with below average school performance, where schools have similar contextual settings.

The EQAO also has a mandate to undertake research and report on factors affecting school quality. It undertook a review of research on the characteristics of effective schools over the past 30 years (Calman, 2010). Their review highlighted findings from Teddlie and Springfield's (2007) review of school effectiveness and improvement and incorporated significant reviews of school effectiveness research and practice in Canadian contexts (e.g., Sackney, 2007; Ungerleider and Levin, 2007). This review of the literature highlighted the integral role of strong and effective principal leadership in leading school improvement and success. The main purpose of the broader research study that is reported on in this paper was to gain a better understanding of factors within and outside a school that help explain differences between schools with higher student performance and schools with below average student performance, where the schools have similar contextual circumstances. The focus was on identifying and describing factors (i.e., student experiences, school improvement initiatives, parental involvement, and leadership) that have contributed to the success of schools with varying demographic characteristics as well as the challenges and impediments to success faced by other schools in similar contexts. The findings of this EQAO-commissioned study[1] as they pertain to principal leadership actions are presented in this paper.

**Theoretical Framework.** We used Leithwood's leadership framework (Leithwood et al., 2004, 2006), which comprises four core leadership practices, as a theoretically and research-grounded foundation for organizing and discussing the findings. This framework is summarized in table 1.

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[1] The research study that provides the basis for this paper was commissioned and funded by the Ontario government's Education Quality and Accountability Office. The findings and conclusions presented in this paper are those of the author and do not represent the official positions or policies of the funder or of the researchers' educational institution.

Table 1. Leithwood's Four Core Leadership Practices

| 1. Setting Directions | • Building a shared vision<br>• Fostering the acceptance of group goals<br>• High performance expectations |
|---|---|
| 2. Developing People | • Providing individualized support/consideration<br>• Intellectual stimulation<br>• Providing an appropriate model |
| 3. Designing or (Re)Structuring the Organization | • Building collaborative cultures<br>• Restructuring<br>• Building productive relationships with families and communities<br>• Connecting the school to its' wider environment |
| 4. Managing the Instructional Program | • Staffing the program<br>• Providing instructional support<br>• Monitoring school activity<br>• Buffering staff from distractions to their work |

**Methodology.** According to the research design, four categories of schools, differing in demographic circumstance and level of performance, were identified by EQAO staff for inclusion in the study. A socio-economic composite indicator was used to classify schools by socioeconomic status (SES). EQAO assessment results in reading, writing and mathematics were used for classifying level of performance of the schools. The criterion for identifying schools with high and low achievement was that they had consistently higher or lower achievement results in reading, writing and mathematics on the Primary and Junior assessments than most of the 40 schools in the province that were most similar to them with respect to socio-economic status. The aim was to recruit six schools (four English language, two French) in each of the four categories of schools. The achieved sample, as described further in Table 2, included 11 English public schools (four school boards), four English Catholic schools (one school board) and seven French language schools (five French Catholic boards). Where possible schools within different sampling groups were selected from the same board (this was not possible for schools within the Francophone school boards).

Table 2. Sample Description

| Board Type | High Performing | | Low Performing | | Total Schools |
|---|---|---|---|---|---|
| | **High SES** | **Low SES** | **High SES** | **Low SES** | |
| **English Public (n=2)** | 2 | 3 | 3 | 3 | 11 |
| **English Catholic (n=1)** | 1 | 1 | 1 | 1 | 4 |
| **French Catholic (n=5)** | 2 | 2 | 2 | 1 | 7 |
| **Total Schools** | 5 | 6 | 6 | 5 | 22 |

We used a survey and individual and focus group interviews to collect data starting in the Spring 2010. The survey included two scaled sets of items adopted from surveys of principal leadership by Ken Leithwood and his colleagues in prior investigations (e.g., Louis et al., 2010). To analyse interview data, we created a coding structure and manual with operational definitions for use when coding interview notes. Individual and focus group data were combined for analysis. Table 3 provides an overview of the data collection, sampling and analysis procedures for quantitative and qualitative data.

Table 3. Overview of data collection and analysis procedures.

| Data collection instrument | Sample | Data analysis |
|---|---|---|
| Survey | • all Kindergarten to grade 6 teachers in all schools<br>(Response rate = 90%) | • descriptive statistics (means, standard deviations)<br>• *t*-tests (using Welch correction where necessary)<br>• *d* statistics to calculate effect sizes |
| Individual interviews | At each school site:<br>- principal<br>- two primary teachers (K- Gr. 3)<br>- two junior teachers (Gr. 4-6) | 1. Generated a report of all interview data tagged to a specific code for all schools within a school sample category |
| Focus group interviews | At each school site:<br>- teachers (specify - 5-6)<br>- parents<br>- grades 5 & 6 students | 2. Inductively generated a set of thematic categories that reflect salient findings within that coded topic<br>3. Generated assertions that describe findings for each major topic aligned with the themes and consistent with matrix analysis for a school group<br>4. compared findings across school groups in order to identify patterns of similarity and differences in findings associated with sample characteristics |

**Findings.** There was a difference in the quantitative and qualitative findings based on the teacher surveys as compared to the teacher and principal interviews. The findings from two survey scales that dealt with the transformational leadership practices (see table 4) and instructional leadership practices (see table 5) of principals yielded few statistically significant differences between high/low performing schools and schools serving high/low socioeconomic communities. The results of the teacher survey seem to indicate that principals are using practices aligned with best practices according to the literature and policies on effective school leadership regardless of school performance and SES category. This null finding was surprising to us, as the scales employed have been used in prior studies to identify variability in principal leadership practices. The lack of differences in the teacher survey data prompted us to look closely at what principals and teachers were saying in the interviews about principal leadership in their schools. When we look at the qualitative data, we can distinguish interesting differences that were not captured in the survey.

Table 4. Teacher survey responses: Transformational leadership practices of principals

| My school's principal… | High performance | | Low performance | | Effect Size |
|---|---|---|---|---|---|
| | M | SD | M | SD | d |
| **Sets directions** | | | | | |
| 1. Gives staff a sense of overall purpose. | 5.09 | 0.92 | 4.90 | 1.23 | 0.17 |
| 2. Helps clarify the reasons for the school improvement initiatives. | 5.16 | 0.99 | 5.15 | 0.99 | 0.01 |
| 3. Provides useful assistance to me for setting short-term goals for teaching and learning. | 4.61 | 1.10 | 4.50 | 1.26 | 0.09 |
| 4. Demonstrates high expectations for my work with students. | 5.32 | 0.75 | 5.18 | 0.98 | 0.16 |
| **Develops people** | | | | | |
| 5. Gives me individual support to help me improve my teaching practices. | 4.54 | 1.18 | 4.51 | 1.42 | 0.02 |
| 6. Encourages me to consider new ideas for my teaching. | 4.86 | 0.95 | 4.88 | 1.21 | -0.02 |
| 7. Models a high level of professional practice. | 5.24 | 0.99 | 5.19 | 1.05 | 0.05 |
| 8. Encourages an atmosphere of caring and trust. | 5.36* | 1.00 | 5.06 | 1.31 | 0.26 |
| **Redesigns the organization** | | | | | |
| 9. Promotes leadership development among teachers. | 5.05 | 0.99 | 4.89 | 1.18 | 0.15 |
| 10. Encourages collaborative work among staff. | 5.47* | 0.87 | 5.26 | 1.00 | 0.22 |
| 11. Ensures wide participation in decisions about school improvement. | 5.21 | 0.94 | 5.06 | 1.21 | 0.14 |
| 12. Engages parents in building community support for the school's improvement efforts. | 4.96* | 0.87 | 4.67 | 1.07 | 0.30 |
| 13. Is effective in building parental support for the school's improvement efforts. | 4.90* | 0.9 | 4.45 | 1.15 | 0.44 |
| TOTAL (α=.95) | 5.07 | 0.71 | 4.88 | 0.97 | 0.22 |

Table 5. Teacher survey responses: Instructional leadership practices of principals

| How often in this school year has your principal… | High performance | | Low performance | | Effect Size |
|---|---|---|---|---|---|
| | M | SD | M | SD | d |
| 1. Discussed instructional issues with you? | 2.59 | 1.23 | 2.7 | 1.13 | -0.09 |
| 2. Encouraged collaborative work among staff? | 4.16 | 1.04 | 3.98 | 1.13 | 0.17 |
| 3. Provided or located resources to help staff improve their instruction? | 3.02 | 1.11 | 3.13 | 1.15 | -0.10 |
| 4. Observed your classroom instruction? | 2.61 | 1.28 | 2.56 | 1.27 | 0.04 |
| 5. Encouraged data use in planning for individual student needs? | 3.06 | 1.13 | 3.02 | 1.23 | 0.03 |
| 6. Attended teacher planning meetings? | 3.29 | 1.23 | 3.12 | 1.37 | 0.13 |
| 7. Given you specific ideas for how to improve your instruction? | 2.46 | 1.16 | 2.62 | 1.20 | -0.14 |
| TOTAL (α=.85) | 3.05 | 0.83 | 3.01 | 0.9 | 0.05 |

Our qualitative findings illustrate variability in how principals enact instructional leadership. We found that many principals in low performing schools appeared to be less effective in using data, generating consensus around goals for improvement and ensuring structures for teachers' teamwork related to school improvement. The few principals who personally led PD activities in their school and provided advice to teachers on instructional practices were concentrated more in schools in challenging socio-economic circumstances, regardless of student performance. Another group of principals enacted their instructional leadership as effective managers through practices such as establishing of clear goals, enabling teacher learning and collaboration, and leveraging pedagogical expertise from inside *and* outside the school. A third group of principals, who were more concentrated in the low performing schools (particularly in the low performing high SES schools), appeared to be comparatively less effective in the enactment of instructional leadership through either of these approaches.

**Importance.** Despite the highlighted differences, there was high degree of similarity across the schools in school improvement focuses and processes, regardless of variations in prior performance and community characteristics. So, why are some schools persistently under-performing? We hypothesize that school leadership is key and that the explanation lies less with differences in the particular leadership practices of the principals than with: (1) the skill with which school improvement-related actions are implemented; (2) the degree of integration and coherence among those actions; (3) the intensity of school improvement efforts over time; and (4) school leader capacity to orchestrate school improvement efforts.

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**Note.** For a copy of the full report of this study titled, *Characteristics of Elementary School Achieving Consistently High or Low Percentage of Students at the Provincial Standard on EQAO Assessments*, please contact Dr. Stephen Anderson, Principal Investigator, at steve.anderson@utoronto.ca.

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