



Advisory

The Council of Ontario Directors of Education (CODE) is an advisory and consultative organization composed of the CEOs of each of the 72 District School Boards in Ontario; Public, Catholic and French Language.

“The gaps in research identified in the preceding analysis point to the need for a strategic, targeted, and coordinated research agenda that will build on existing knowledge to inform policy and practice more precisely and specifically for the Canadian context.”

Canadian context.” Canadian Education Statistics Council. (2009). *Key Factors to Support Literacy Success in School-Aged Populations: A Literature Review*. Council of Ministers of Education. p. 12
<http://www.cmec.ca/Publications/Lists/Publications/Attachments/2011/key-factors-literacy-school-aged.pdf>

“I have come to the conclusion that practice drives theory. That is, focusing on improving practice uncovers the best specific ideas. What you learn along the way can be tested in the light of broader research, but practice – not research – should be the driver.”

Fullan, Michael. (Summer 2010). “The BIG Ideas Behind Whole System Reform” in *Education Canada*. Canadian Education Association. Vol. 50 (3). p. 25
http://www.michaelfullan.ca/Articles_10/BigIdeas-CEA.pdf

Effective Use of Educational Research

What do I need to know about research/evaluation in public education in Ontario?

All professions maintain relevance through a commitment to continuous improvement. Education is no different. Inquiry, data analysis, research and evaluation, and public accountability are integral components of the improvement process. *The Royal Commission on Learning* 1994 and the creation of the Education Quality and Accountability Office (EQAO) in 1995 heightened awareness of accountability issues and focussed attention on instructional practices and student outcomes. *The Schools We Need – A New Blueprint for Ontario* released in 2003, co-authored by Ken Leithwood, Michael Fullan, and Nancy Watson, reinforced the need for Ontario’s education leaders to collect and examine data regularly and to adopt evidence-based practices.

Reach Every Student: Energizing Ontario Education 2007 identified three core priorities: improved levels of student achievement, reduced gaps in student achievement, and increased public confidence in publicly funded education. This direction was supported by the establishment of Managing Information for Student Achievement (MISA), a Ministry initiative to increase provincial and local capacity to work with data and information to support improved student outcomes.

In 2008, the Ministry created a provincial research evaluation strategy to build individual and organizational capacity to access, use, and conduct research. The strategy is based on the three core priorities noted above. The provincial research evaluation strategy does not focus on public ratings and rankings of schools. Instead, it highlights capacity building – identifying and spreading effective classroom practices.

These collective actions have strengthened the precision of professional practices, resulting in improved student achievement in Ontario. These actions have also increased the urgency for knowledge mobilization as a means of decreasing the gap between the best instructional ideas and day-to-day practice. In order to appreciate the relevance of research, teachers need to see themselves as conducting classroom research – using data to identify needs, designing specific instructional interventions, conducting classroom research about what works, and then evaluating their practices in the context of the wider findings of other educators and professional researchers. It is important for educators to trust their own knowledge and experience. At the same time, there is a real need to enhance professional learning about educational research.

Educators need to study their practice in the light of research. Research is an important tool to support evidence-based instructional decisions, and research evidence contributes to increased confidence in public education.

Indicators of Effective Use of Data and Research:

- The examination of data and evidence-based research is common practice in the district and schools.
- Data and evidence-based research are used in district, school, and classroom planning and decision-making.
- Data and research are used in support of strategic goals in the board improvement plan and school improvement plans.
- Time is provided for team inquiry and reflective practice.
- Planning is guided by those with experience in using data to improve practice.
- Research and evaluation inform decision-making at meetings of system leaders. Questions to be considered at these meetings include:
 - What does our data tell us about how many students leave the system each year and why?
 - What does the research literature say about re-engaging early school leavers?
 - What does our data tell us about what is working, and what is not working?
- Knowledge of evidence-based practices is incorporated in all implementation efforts.



What does the Ministry say about research/evaluation in public education?

Legislation:

- **Privacy and Information Management (PIM):** Privacy and information management is governed by the *Municipal Freedom of Information and Protection of Privacy Act (FIPPA)*. All boards and board employees must adhere to this legislation. Protecting privacy rights is becoming more complex because of increased access to information. PIM defines and advances a set of standards for managing and providing stewardship for the collection, use, disclosure, retention, and destruction of school district data. PIM communication plans ensure that regular updates and progress reports are distributed to the stakeholders, including the Council of Directors of Education (CODE), the Council of Senior Business Officials (COSBO), the Ontario Association of School Business Officials (OASBO), and all MISA provincial network centres. As school board data collection grows and become more complex, the legal obligations concerning privacy and information have become a very serious issue and one that demands planned action and regular monitoring. For more information concerning PIM, see the following website: <http://www.pimedu.org>

Memoranda:

- **Knowledge Network for Applied Educational Research November 25, 2010 (KNAER):** This memorandum to directors of education and deans of education describes KNAER as a partnership among the Ministry of Education, the University of Toronto, and the University of Western Ontario. KNAER focuses on building, advancing, and applying robust evidence of effective practices through conducting research, synthesizing state-of-the-art knowledge from existing bodies of evidence (from Ontario and beyond), and facilitating networks of policy-makers, educators, and researchers working collaboratively to apply research to practice.

Guidelines (Government of Canada):

- **Ethics and Research:** At the federal level there are guidelines governing research. *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada) December 2010, governs all research with humans in Canada. This guideline on ethics stresses that all research concerning human subjects is expected to adhere to three overriding principles:
 - respect for persons;
 - concern for their welfare; and
 - justice for subjects.

Board research needs to be compliant with the Tri-Council Policy Statement. Some of the issues examined in this policy statement include: when an ethics review is mandatory, when consent is required, and directives related to fair and equitable research practices.

Ministry Strategy:

- **Ontario's Education Research Strategy:** In July 2008, the Ministry adopted a research and evaluation strategy comprised of six key elements:
 1. leading the Ministry's research agenda to coordinate and manage Ministry research and evaluation activities to support provincial education goals;
 2. applying research and evaluation to support evidence-based policy and program decisions and practices;
 3. building individual and organizational capacity to access, use, and conduct research and evaluation;
 4. fostering research collaboration, through networking and partnerships between and among Ministry staff and researchers and educators across Ontario, to address priority research and evaluation needs;
 5. communicating information about existing and new research and evaluation activities and findings; and
 6. contributing to the provincial, national, and international body of research knowledge about educational policies, programs, and practices.

The research strategy initiates pilot projects to help build and improve research and evaluation capacity to support improved classroom practices. These projects are regionally based and examine district, school, and classroom practices that impact on student achievement.

Board requirements:

- Submit data to the Ministry through the Ontario Student Information System (OnSIS) in October, March and June (student enrolment, demographics, special education, ESL/ELL, credit accumulation, current and next year timetables, course outcome data, suspension/expulsion data, eLearning, report card data, staff assignments, class code/size and course type). Boards are also required to submit information related to summer/evening school adult credit programs.
- Report to the Ministry of Education on initiatives such as the School Effectiveness Framework, Schools in the Middle, and Board Improvement Planning for implementation accountability, financial accountability, and to share lessons learned. Each report emphasizes the need to demonstrate evidence-informed decision-making.
- Establish a MISA (Managing Information for Student Achievement) leader position. Funding in 2011-2012 for these positions has been eliminated at the board level, although funding continues for the Professional Network Centres (PNCs) which act as professional learning communities.
- Ensure regulations, structures, and processes are in place to protect individual rights and freedoms concerning personal information.
- Ensure external and internal research projects are aligned with board priorities, protection of students and staff (ethics, methods). Boards need to use the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* to ensure that research projects requiring ethics approvals meet the federal guidelines. It should be noted that while research projects need ethics approvals, evaluation or assurance projects do not. It is also important to note that if a researcher wishes to engage the board in a study, boards have a responsibility to ensure adherence to the Tri-Council policy statement.

Supervisory officers are expected to:

- model the work/the behaviour;
Simply providing knowledge does not change human behaviour. Behaviour is rooted in social settings, which means that the primary determinants of professional behaviour are related to what colleagues and superiors do and value.
- have basic research literacy;
Directors and superintendents need to ensure they have basic research literacy so they can effectively understand local data and its implications, research and evaluation findings, and their application.
- ensure that proposals for new initiatives are grounded in evidence;
Proposals for initiatives requiring board resources (staff and funding) must be grounded in evidence from bodies of research, not single studies.
- ensure there is supporting evidence before moving decisions forward;
- promote research, data-informed decision-making, and support these priorities with dedicated resources;
- develop a culture of inquiry that is focussed on reviewing data and evidence-based research for the purpose of improving student achievement, organizational effectiveness, and implementation; and
- be prepared to guide a process of data investigation.

What are the important practices for effectiveness?

- Current evidence-based research is well communicated and is received by policy makers and practitioners who are willing to share and use the research.
- Research and evaluation findings are regularly discussed at all levels of meetings, posted in staff rooms, and noted in system newsletters.
- "Grass roots" inquiry at the school and department level is common practice. It builds system capacity and deepens the credibility and relevance of research activities.

Indicators of concern for evaluation/research:

- Lack of access to research that has been consolidated in a meaningful way.
- Inconsistent results, lack of in-depth study of data, and lack of synthesis of district data with current research.
- Lack of knowledge of individuals to access relevant research.
- The challenge of determining the quality and applicability of the work/research.
- Studies that do not link post-intervention results unambiguously to a particular intervention.

Important Questions:

- What to include in a research database?
- Who determines the quality of data?
- Do we include opinions, and if so, how do we determine whose opinions are included?
- Who has access to the data and for how long?
- Are data-sharing agreements needed and /or in place? Who monitors these agreements?
- How are questions addressing ethics and values addressed?



Links to Additional Information

- Ethics and Research Guidelines
To view an in-service video or to download the full document, connect to the Government of Canada website: www.pre.ethics.gc.ca.
- Ontario Ministry of Education's Research and Evaluation Strategy
<http://www.edu.gov.on.ca/eng/research/strategy.html>
- Ontario Ministry of Education – Practical Strategies for Student Achievement
<http://www.inspirelearning.ca/>
- Knowledge Network of Applied Education Research – OISE
http://www.oise.utoronto.ca/knaer/The_Ontario_Education_Research_Exchange/
- Research Supporting Practice in Education – OISE
www.oise.utoronto.ca/rspe
- Canadian Council on Learning (CCL) www.ccl-cca.ca
- The Evidence for Policy and Practice Information and Co-ordinating Centre – University of London
<http://eppi.ioe.ac.uk/cms/>
- The UK Educational Evidence Portal <http://www.eep.ac.uk/DNN2/>
- National Implementation Research Network – U.S.
<http://www.fpg.unc.edu/~nirn/default.cfm>
- West Wind Education Policy – U.S. <http://westwinded.com/tag/systems-change/>

- The district recognizes the importance of interpersonal relationships in shaping professional practice and has processes and structures in place that allow for individual and group inquiry.
- There is infrastructure to support the collection, analysis, interpretation, and sharing of data.
- There is a systematic approach to program evaluation, and key initiatives are regularly evaluated.
- There is a connection between research evidence and the delivery of district professional development. For the purposes of sustainability this is a core component in the district's leadership strategy and succession planning.
- District evaluation standards and accountability measures are universally understood. These standards are applied to the implementation of all new district programs.
- The district has effective implementation practices that foster spread, depth, and fidelity while embedding professional ownership for the change. See the National Implementation Research Network site: <http://www.fpg.unc.edu/~nirn/default.cfm>.
- New and revised policies include references to supporting research.
- A dedicated staff person is appointed as the leader for research. This role includes building capacity to access, understand, use, and conduct research and evaluation activities.
- Research evidence is used as a change lever to support colleagues who have no direct experience of the research projects or relationship with the researchers.
- Research activities are aligned with system initiatives and there is a clear effort not to create competing forces. Schools and school districts that plan research around mandated activities such as Student Success, Literacy/Numeracy, the School Effectiveness Framework and Leadership Framework are more likely to be successful in integrating research and evaluation into the daily fabric of the organization.
- Policies, procedures, structures, and processes are in place to regulate the ethics and privacy requirements related to research practice.
- Partnerships with external researchers are in place.
- Educators in graduate programs are encouraged to share their work/learning with colleagues both formally and informally.
- Research partnerships and collaborations between schools/school districts, universities, colleges, and external researchers build internal research capacity. These professional relationships assist in securing commitment of practitioners (teachers, principals, superintendents etc.) to the results and to the implementation of evidence-based practices. Debate and discussion are a common district practice for the purpose of ensuring that research knowledge is taken seriously and is subject to interrogation.
- Inquiry and research collaboration exists with other schools/school districts and the MISA Professional Network Centre is used as a regular source of knowledge exchange. The Centre is particularly helpful in supporting smaller boards.
- The strongest indicator that distinguishes high performing school districts is the existence of dedicated resources, administered by specified research staff that manage data and conduct inquiries and build system capacity. This department/staff is also used within the organization to support the decision-making of system officials and members of the corporate board.
- For more information on effective practice, see *What Works? Research into Practice. Using Data to Improve Student Achievement. Ministry of Education Monograph #15.* http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/using_Data.pdf

If as a supervisory officer, I have concerns and need assistance, what should I do?

- Contact the appropriate branch at the Ministry of Education to obtain further information and support with regard to data management and educational research.
- Speak with the Ontario Institute for Studies and Education Research Department.
- Search online for the following research associations: Association of Educational Researchers of Ontario (AERO); Canadian Educational Researchers' Association (CERA); Canadian Council on Learning (CCL).