



MEASURING WHAT MATTERS: QUALITY LEARNING ENVIRONMENTS

QUALITY LEARNING ENVIRONMENTS

Schools are dynamic learning environments that influence students' academic, affective, social, and behavioral learning.¹ The school's learning environment influences students' opportunities to use the educational system as a foundation for further education. Ultimately, quality school experiences contribute to students' long-term outcomes, including meaningful and satisfying adult lives in a democratic society.²

Different factors in the school's learning environment contribute to student learning, but the learning processes within a school cannot be reduced to any single factor like *school leadership*, in isolation from others factors like *trust amongst teachers and students*.³ Thus, to understand the learning processes within a school, it is important to understand the dynamic and interactive reality of schools—how collegiality amongst educators, for example, works in tandem with other elements, such as educator professional learning, to influence what and how students learn.

Examining learning environments by measuring a wide variety of school indicators and the way these indicators interact provides rich information on the quality of resources, people and activities that shape students' learning experiences.

POSITIVE LEARNING ENVIRONMENTS WITHIN SCHOOLS

Schools with positive learning environments typically exhibit high levels of trust amongst school leaders and teachers. These schools focus on academic achievement but do so through a collaborative environment in which risk taking and experimentation is valued. School members exhibit confidence, intellectual engagement and a strong sense of belonging.

School factors that contribute to quality learning environments are connected, rather than discrete, and work together in concert. A school's environment can be understood from a consideration of the variety of places in which student learning occurs within classrooms and across the school outside of the classroom—the hallways, school yard and school library amongst others. Equally, the places in which educators meet and interact both in the staff room and in non-teaching meetings are critical to the working environment within the school.

Research has repeatedly demonstrated that instruction and other factors in the classroom environment have the greatest impact on student learning. At the classroom level, teachers' instructional practices are of paramount importance to the learning environment.⁴ Quality instructional practices such as linking learning to factors that are important in students' lives;⁵ using a variety of different teaching methods;⁶ making adjustments for different learning styles;⁷ maintaining and communicating high expectations for all students;⁸ using formative and summative assessments in a systematic manner;⁹ setting objectives and providing regular feedback;¹⁰ providing opportunities for participation in classroom activities;¹¹ and helping students to draw connections between different disciplines¹² all exert a powerful influence on student learning.

The classroom environment includes much more than the teacher's instructional practices. The quality of life in the classroom is of great importance to students and affects how and what they learn.¹³ Teachers create a quality classroom environment by creating an atmosphere in which diversity is respected and individual differences are appreciated;¹⁴ treating social and emotional learning as a valuable and teachable subject;¹⁵ fostering positive relationships;¹⁶ using systematic classroom management strategies and consistent, non-coercive approaches to discipline.¹⁷

The classroom environment and student outcomes are influenced by a number of school features beyond the classroom. Teacher communities within the school have a strongly positive impact on student learning when teachers participate in professional learning communities that: maintain a clear and consistent focus on student learning; engage extensively in reflective dialogue about curriculum, instruction, and student progress; use a variety of classroom-based data to inform and refine their work; and have access to new pedagogic ideas and professional development opportunities.¹⁸

Teachers' working conditions also shape student learning. School level factors that have repeatedly been identified by teachers as critical to the quality of their work include manageable workload and class size; time available for professional, non-teaching work; resource adequacy; collegiality and stimulating professional interactions; opportunities to learn and improve; support for professional risk-taking and experimentation; ability to influence school decisions; and congruence between individual and organizational goals.¹⁹ School leaders contribute to quality learning environments by identifying and articulating a vision that inspires staff and students to reach for ambitious goals, and by ensuring that teachers have the resources they need to teach well.²⁰ School leadership is most effective when it is shared across the school's staff, adapted to the needs of the school, and models ongoing learning for all stakeholders.²¹

School learning environments also operate through a "hidden curriculum," the unspoken messages students receive from structures of authority and the values implicit in the operations of school. When these messages include high expectations for achievement and school level policies, practices, expectations, norms and rewards favour academic achievement for all students, the hidden curriculum contributes to quality learning environments.²²

Feeling physically, socially and emotionally safe—for both students and staff—is another component of school environments that support successful student outcomes.²³ The physical structure of the school is a part of the school environment and affects how and how well students learn. Clean, well-maintained and appropriately resourced facilities have been linked to higher achievement scores, fewer disciplinary incidents, better attendance, and more positive attitudes toward learning among students.²⁴

Schools are located within an external environment that includes parents, the community, the economic conditions present in those communities, and the values espoused by that community. The external environment includes curriculum standards, achievement

In a democratic and socially cohesive society, people must be capable of understanding the impact of their behaviour and decisions on others. In order to do this, they need to imaginatively take the role of another. They need to judge their own actions from the perspective of other people. They need to consider the consequences of the actions they advocate.

expectations, programmatic requirements, and other policy directives from school boards and ministries of education. The presence of caring and supportive adult relationships, opportunities for meaningful student participation in their communities, and high parent expectations regarding student achievement all contribute to quality learning environments.²⁵ Policies that are congruent with positive learning environments also affect student learning through their influence on the school’s organization and operation.

As detailed, students’ school experiences occur at many levels. Factors at the level of the classroom, teacher community, school, and external context combine to create productive learning environments. While classrooms are of central importance to a schools’ learning environment, there are many other contributing factors. These factors are related and connected. In attempting to define and measure positive learning environments within schools, the relational quality of these factors—the connections amongst the various factors—is an important part of what is measured, who is measuring and how they are measured.

MEASURING QUALITY LEARNING ENVIRONMENTS

Many of the factors that contribute to quality learning environments can be measured. Data on learning environments can be collected through a variety of methods, including: focus groups, observational methods, interviews, town hall discussions, and surveys. Any measurement approach should include students, teachers, staff, and parents, and should assess the full range of factors that shape student and educator experiences of the learning environment.²⁶ The table below provides a sample of factors that contribute to quality learning environments. It is helpful to break these potential indicators down in relation to where they occur in order to get a holistic sense of a school’s working practices. However, the potential indicators listed in the table below need to be considered as an interactive set. For example, establishing a *clear school vision across the school* can occur through ongoing *teacher community dialogue and collaboration* that also serves to enhance *opportunities for students to participate in the classroom*.

Classroom	Teacher Community	School
Learning is linked to students’ lives	Teachers participate in professional learning communities	The school leadership articulates a clear vision that includes achievement, respect, and care
Connections are made between different disciplines	Teachers maintain a clear and consistent focus on student learning	The school leadership models continuous learning
A variety of different teaching methods are used	Teachers discuss curriculum, instruction and student progress	Leadership and decision-making are shared
Different learning styles are respected	Teacher-teacher relationships are positive and collegial	Leadership practices are adapted to the school’s needs
High expectations for all students	Teachers have time for common academic planning	Individual and school level goals are congruent
Formative and summative evaluations are used systematically	Teachers have non-teaching professional time	The principal provides instructional leadership
Teachers set clear objectives, monitor progress, and provide feedback	Teachers have access to new pedagogic ideas and professional development	The school leadership articulates a clear vision that includes achievement, respect, and care
Opportunities for classroom participation	Teachers use classroom-based data from a variety of sources to inform and refine their work	The school leadership models continuous learning
Diversity and individual differences are respected		Leadership and decision-making are shared
Social and emotional learning is valued		Leadership practices are adapted to the school’s needs
Positive student-teacher and student-student relationships		Individual and school level goals are congruent
Classroom management strategies are systematic		The principal provides instructional leadership
Disciplinary strategies are consistent and non-coercive		

Measuring the learning environment can provide critical information about what schools do that has an impact on student learning. Data on learning environments can inform individual schools about the areas where they excel and the areas that require improvement. Such data can also be informative at the system level, helping decision-makers to determine the effects of policies and reform efforts.

ENDNOTES

- 1 Gu, Q. & Johansson, O. (2013). Sustaining school performance: School context matters. *International Journal of Leadership in Education*, 16(3), 301-326.
- 2 Pickeral, T., Evans, L., Hughes, W. & Hutchison, D. (2009). *School Climate Guide for District Policymakers and Educational Leaders*. New York, NY: Center for Social and Emotional Education.
- 3 Deakin Crick, R., H. Green, S. Barr, A. Shafr & W. Peng (2013). *Evaluating the wider outcomes of schooling: Complex systems modeling*. Bristol, UK: Centre for Systems Learning & leadership, Graduate School of Education, University of Bristol.
- 4 Hattie, J. A. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London,UK: Routledge.
- 5 Crowley, K. (2003). Learning new problem-solving strategies by observing and explaining. In D. Fasko (Ed.). *Critical Thinking and Reasoning: Current Research, Theory, and Practice* (pp. 99-119). Cresskill, NJ: Hampton Press, Inc.
- 6 Hattie, J. A. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London,UK: Routledge.
- 7 Orlich, D., Harder, R., Callahan, R., Trevisan, M., & Brown, A. (2012). *Teaching strategies: A guide to effective instruction*. Cengage Learning.
- 8 Jussim, L., & Eccles, J. S. (1992). Teacher expectations: II. Construction and reflection of student achievement. *Journal of personality and social psychology*, 63(6), 947.
- 9 Black, P., & Wiliam, D. (1998). Inside the Black Box. *Phi Delta Kappan*, 80(2), 139-148.
- 10 Marzano, R. J., Pickering, D., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. ASCD: Alexandria, VA.
- 11 Parsons, S. A., Nuland, L. R., & Parsons, A. W. (2014). The ABCs of student engagement. *Phi Delta Kappan*, 95(8), 23-27. Phelan, P., A. Davidson & H. Yu (1996). *Adolescents' worlds: Negotiating family, peers and school*. New York: Teachers College Press.
- 12 Dunleavy, J., & Milton, P. (2009). What did you do in school today? Exploring the concept of student engagement and its implications for teaching and learning in Canada. *Canadian Education Association (CEA)*, 1-22.
- 13 Watkins, C. (2005). *Classrooms as Learning Communities: What's in it for schools*. London: Routledge Falmer.
- 14 Bondy, E., Ross, D. D., Gallingane, C., & Hambacher, E. (2007). Creating environments of success and resilience culturally responsive classroom management and more. *Urban Education*, 42(4), 326-348.
- 15 Zins, J. E. (Ed.). (2004). *Building academic success on social and emotional learning: What does the research say?*. Teachers College Press.
- 16 Fraser, B. J., & Walberg, H. J. (2005). Research on teacher-student relationships and learning environments: Context, retrospect and prospect. *International Journal of Educational Research*, 43(1), 103-109.
- 17 Marzano, R.J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.
- 18 Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and teacher education*, 24(1), 80-91.

- 19 Bascia, N., & C. Rottmann (2011). What's so important about teachers' working conditions? The fatal flaw in North American educational reform. *Journal of Education Policy*.
- 20 Leithwood, K. & Riehl, C. (2003). *What we know about successful school leadership* (pp. 1-14). Nottingham: National College for School Leadership.
- 21 Hallinger, P. (2009). Leadership for 21st century schools: From instructional leadership to leadership for learning. Public Lecture Series. The Hong Kong Institute of Education. September 23, 2009.
- 22 Murphy, J., Weil, M., Hallinger, P., & Mitman, A. (1985, September). School effectiveness: A conceptual framework. In *The Educational Forum* (Vol. 49, No. 3, pp. 361-374). Taylor & Francis Group.
- 23 Cohen, J., McCabe, E., Michelli, N., & Pickeral, T. (2009). School climate: Research, policy, practice and teacher education. *Teachers College Record*, 111(1), 180-213.
- 24 McGuffey, C. W. (1982). Facilities. In H. Walberg (Ed.) *Improving Educational Standards and Productivity*. Berkley: McCutchan Publishing.
- 25 Wang, M. C., Haertel, G. D., & Walberg, H. J. (1998). *Building Educational Resilience. Fastback 430*. Phi Delta Kappa International, 408 North Union, PO Box 789, Bloomington, IN 47402-0789.
- 26 Cohen, J., Pickeral, T., & McCloskey, M. (2008). The challenge of assessing school climate. *Educational Leadership*, 66(4), 1-8.

People for Education – working with experts from across Canada – is leading a multi-year project to broaden the Canadian definition of school success by expanding the indicators we use to measure schools’ progress in a number of vital areas.

The domain papers were produced under the expert guidance of Charles Ungerleider and Directions Evidence and Policy Research Group.

NOTICE OF COPYRIGHT AND INTELLECTUAL PROPERTY

The Measuring What Matters reports and papers were developed in partnership with lead authors of each domain paper. Permission to photocopy or otherwise reproduce copyrighted material published in this paper should be submitted to Dr. Nina Bascia at nina.bascia@utoronto.ca or People for Education at info@peopleforeducation.ca.

DOCUMENT CITATION

This report should be cited in the following manner:

Bascia, N. (2014). *The School Context Model: How School Environments Shape Students’ Opportunities to Learn*. In Measuring What Matters, People for Education. Toronto: November 8, 2014

We are immensely grateful for the support of all our partners and supporters, who make this work possible.

BROADER MEASURES OF SUCCESS ADVISORY COMMITTEE:

Annie Kidder, Executive Director, People for Education

David Cameron, Research Director, People for Education

Charles Ungerleider, Professor Emeritus, Educational Studies, The University of British Columbia and Director of Research, Directions Evidence and Policy Research Group

Lindy Amato, Director, Professional Affairs, Ontario Teachers’ Federation

Nina Bascia, Professor and Director, Collaborative Educational Policy Program, Ontario Institute for Studies in Education, University of Toronto

Ruth Baumann, Partner, Directions Evidence and Policy Research Group

Kathy Bickmore, Professor, Curriculum, Teaching and Learning, Ontario Institute for Studies in Education/ University of Toronto

Michelle Boucher, University of Ottawa, Advisors in French-language education and

Ron Canuel, President & CEO, Canadian Education Association

Ruth Childs, Associate Professor, Leadership, Higher and Adult Education, Ontario Institute for Studies in Education/University of Toronto

Jean Clinton, Associate Clinical Professor, McMaster University, Dept of Psychiatry and Behavioural Neurosciences

Gerry Connelly, Director, Policy and Knowledge Mobilization, The Learning Partnership

J.C. Couture, Associate Coordinator, Research, Alberta Teachers' Association

Fiona Deller, Executive Director, Policy and Partnerships, Higher Education Quality Council of Ontario

Kadriye Ercikan, Professor, Measurement, Evaluation and Research Methodology, University of British Columbia

Bruce Ferguson, Professor of Psychiatry, Psychology, Dalla Lana School of Public Health, University of Toronto; Community Health Systems Research Group, SickKids

Joseph Flessa, Associate Professor, Leadership, Higher and Adult Education, Ontario Institute for Studies in Education, University of Toronto

Joan M. Green, O.Ont., Founding Chief Executive Officer of EQAO, International Education Consultant

Andy Hargreaves, Thomas More Brennan Chair, Lynch School of Education, Boston College

Eunice Eunhee Jang, Associate Professor, Department of Applied Psychology & Human Development, Ontario Institute for Studies in Education, University of Toronto

Christopher Kotz, Senior Policy Advisor, Ontario Ministry of Education

Ann Lieberman, Stanford Centre for Opportunity Policy in Education, Professor Emeritus, Teachers College, Columbia University

John Malloy, Director of Education, Hamilton-Wentworth District School Board

Roger Martin, Premier's Chair on Competitiveness and Productivity, Director of the Martin Prosperity Institute, Rotman School of Management, University of Toronto

Ayasha Mayr Handel, Ontario Ministry of Children and Youth Services

Catherine McCullough, former Director of Education, Sudbury Catholic District School Board

Robert Ock, Healthy Active Living Unit, Health Promotion Implementation Branch, Health Promotion Division, Ontario Ministry of Health

Charles Pascal, Professor, Ontario Institute for Studies in Education, University of Toronto, **Jennifer Riel**, Associate Director, Desautels Centre for Integrative Thinking, Rotman School of Management, University of Toronto

Joanne Robinson, Director of Professional Learning, Education Leadership Canada, Ontario Principals' Council

Bruce Rodrigues, Chief Executive Officer, Ontario Education Quality and Accountability Office

Pasi Sahlberg, Director General, Centre for International Mobility and Cooperation, Finland

Alan Sears, Professor of social studies and citizenship education, University of New Brunswick

Stuart Shanker, Research Professor, Philosophy and Psychology, York University; Director, Milton and Ethel Harris Research Initiative, York University; Canadian Self-Regulation Initiative

Michel St. Germain, University of Ottawa, Advisors in French-language education

Kate Tilleczek, Professor and Canada Research Chair, Director, Young Lives Research, University of Prince Edward Island

Rena Upitis, Professor of Education, Queen's University

Sue Winton, Assistant Professor, Faculty of Education, York University and former Early Learning Advisor to the Premier Deputy Minister of Education

OUR FUNDERS



**R. HOWARD WEBSTER
FOUNDATION**



PEOPLE FOR EDUCATION
641 Bloor St. West, Toronto, ON M6G 1L1
416-534-0100
www.peopleforeducation.ca

© Measuring What Matters, People for Education, 2014
People for Education is a registered charity working to support public education in Ontario's English, French and Catholic schools. Charitable No. 85719 0532 RR0001

641 Bloor Street West, Toronto, ON M6G 1L1
Phone: 416-534-0100 or 1-888-534-3944
Email: info@peopleforeducation.ca