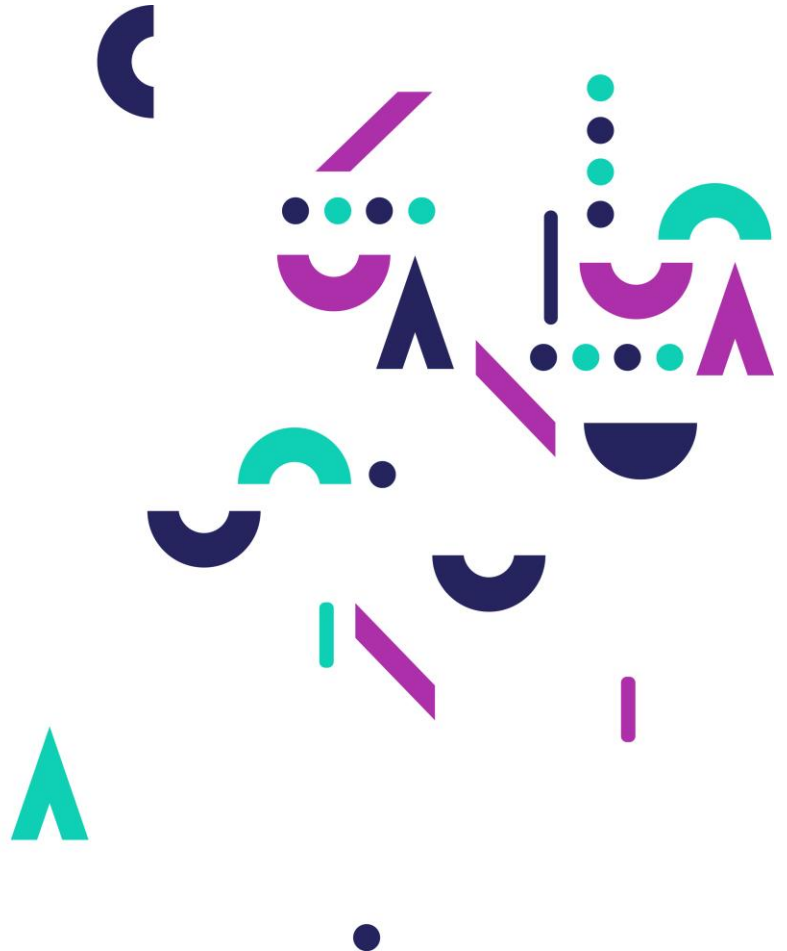# Measuring What Matters

Finding congruence of measurement and assessment of broad areas of student success at central and local levels

People for
Education

People for Education

- **Independent, non-profit organization**
- **Working since 1996 to ensure public education can live up to its promise**
- **Funded by foundations, government, donors**
- **Works with multiple partners including school boards, parents, teachers, universities, government**
- **Conducts research, holds conferences, facilitates broad public dialogue, oversees wide communications strategy including extensive media outreach**

Canada / the world needs

- **New generations with the skills to innovate, adapt, imagine and continue to learn**
- **New thinking about how to address growing gaps between rich and poor, and between indigenous and non-indigenous people**
- **Young people with the capacity and desire to be civically engaged**
- **A population that is healthier, both physically and mentally**
- **A society committed to sustainable development**

The theory of change

- **Public education is a key lever of change toward the social outcomes we want to see in Ontario.**

- **Measurement is the key lever to transform the system.**

- **The priorities of the public education system are driven by what it measures.**

- **If we change what the system measures, we will change the way the system functions, what it invests in, and what it prioritizes.**

The domains

CREATIVITY

CITIZENSHIP

HEALTH

SOCIAL-EMOTIONAL LEARNING

QUALITY LEARNING ENVIRONMENTS

Creativity competencies

- **Imaginative**
  - e.g. students apply metaphorical thinking, use intuition, work without an end goal in mind...

- **Inquisitive**
  - e.g. students challenge assumptions, integrate different sets of discipline knowledge or skills to solve problems, articulate potential problems to solve within ambiguous or complex phenomena...

- **Collaborative**
  - e.g. students ask for evaluative input from teachers and peers, integrate ideas and feedback offered by others, share information and ideas...

- **Disciplined**
  - e.g. students objectively assess the strengths and weaknesses of creative ideas/work/products, refine and improve work, critically reflect on the outcomes of the work...

- **Persistent**
  - e.g. students explore ambiguous and complex phenomena, take paths or approaches different from their peers or teachers, defend solutions and break conventions...

Citizenship competencies

- **Appreciation of diversity**
  - e.g. students understand cultural identity as complex, mixed and changing, articulate elements of their cultural identity and worldview...

- **Awareness of power**
  - e.g. students describe power relationships in society between and among individuals, groups and institutions, evaluate the use of power from multiple perspectives – the degrees to which it is or is not fair, justified and/or arbitrary...

- **Voice and decision making**
  - e.g. students articulate how individuals and groups have understood important social, environmental and/or economic issues, ...

Social-emotional competencies

- **Self-awareness**
  - e.g. students identify and describe their own emotions, develop an accurate sense of their capacity to succeed...

- **Self-management**
  - e.g. students monitor and adapt academic goals, develop persistence, develop self-regulations skills...

- **Social awareness**
  - e.g. students understand others' perspectives, recognize verbal and non-verbal emotional cues in themselves and others...

- **Interpersonal relationship skills**
  - e.g. students build and maintain trust in themselves and others, develop collaborative skills, resist inappropriate/negative social pressures...

- **Decision making skills**
  - e.g. students identify problems when making decisions and generate alternatives, make decisions based on moral, personal and ethical standards...

Health competencies

- **Physical fitness**
  - e.g. students develop muscular strength, body and spatial awareness...

- **Capacity to make healthy choices**
  - e.g. students acquire knowledge and sense of responsibility for healthy eating choices...

- **Well-being in relation to sexuality**
  - e.g. students develop secure sexual identity, understand importance of intimate relationships...

- **Capacity to understand and manage mental illness**
  - e.g. students are informed about mental health issues, able and willing to seek help for mental health issues for themselves and others, feel safe and included at school...

- **Mental health/social-emotional learning**
  - e.g. students develop social-emotional skills and competencies that promote and support their mental health...

Quality learning environments exist…

- **Within the classroom**
  - Welcoming, high expectations, support risk-taking, include multiple forms of learning and assessment…

- **Within the school**
  - Shared authority, collaborative, student input, strong social relationships, action research teams, open to community, integrated outside supports…

- **Beyond the school**
  - Agreements with community partners, learning opportunities outside school…

94 competencies

Creativity

Generation of ideas and possibilities:
• Students gather information through all senses
• Students think flexibly
• Students make connections across disciplines and between objects and ideas
• Students rely on intuitive leaps
• Students take risks and work well in uncertain, ambiguous contexts
• Students think about and work with objects and ideas without an end goal in mind
• Students generate a range of novel ideas in relation to personal knowledge and learning context
• Students articulate potential problems to solve within ambiguous or complex phenomena
• Students empathize with others through careful observation and open-ended questioning
• Students reflect on their own thinking process and on the origins of their ideas

Evaluation and improvement
• Students objectively assesses the strengths and weaknesses of creative ideas, work or products
• Students critically reflect on the outcomes of the work
• Students ask for evaluative input from teachers and peers
• Students ask for assistance in a thoughtful and respectful manner
• Students refine and improve work
• Students explore, observe, visualize and detect patterns in all subject discipline contexts

Generation plus evaluation
• Students explore ambiguous and complex phenomena
• Students apply metaphorical thinking
• Students take different paths or approaches from their peers or teachers
• Students challenge assumptions and break conventions
• Students explore initial ideas more deeply, they practice and improve
• Students respond with curiosity
• Students seek new resources to answer emerging questions
• Students integrate ideas offered by someone giving feedback into new solutions
• Students integrate different sets of discipline knowledge or skills to solve problems
• Students share information and ideas, communicate with precision

Social-emotional learning

Competencies that support self-awareness
• Students develop an accurate understanding of themselves.
• Students identify and describe their own emotions.
• Students understand why they feel the way they do.
• Students are honest with themselves and others.
• Students recognize what others are feeling and why.
• Students develop an accurate sense of their capacity to succeed in a variety of situations (i.e. persistence, motivation, confidence, resilience, limitations).
• Students understand their own needs and values.
• Students develop an accurate understanding of themselves, such as their learning styles, strengths, and areas that need improvement.

Competencies that support Self-Management
• Students develop meta-cognitive skills—skills for managing one's own learning and emotions.
• Students develop personalized learning strategies to master academic material.
• Students monitor and manage academic goals.
• Students develop strategies for setting short and long-term goals.
• Students develop adaptability and flexibility.
• Students develop persistence—they respond and adjust to perceived failure.
• Students respond constructively to internal and external factors that have an impact on their learning and emotion.
• Students develop self-regulation skills and strategies for their feelings, e.g. agitation, anger, elation or listlessness.
• Students manage interpersonal stress and emotions (how to verbalize and develop strategies to manage anxiety, anger, and depression).
• Students develop positive motivation, a sense of hope, optimism, and satisfaction.

Competencies that support Social Awareness
• Students understand others' perspectives.
• Students recognize verbal and non-verbal emotional cues in themselves and in others.
• Students adapt to the mood of a group and respond constructively.
• Students empathize with others.
• Students assess risk of social danger and respond appropriately.
• Students understand diverse cultural contexts.
• Students appreciate diversity.
• Students demonstrate social responsibility.

Competencies that support Interpersonal Relationships
• Competence in interpersonal relationships involves students' ability to develop and maintain healthy relationships. These attributes are vital for students' long-term success.
• Students build and maintain trust in themselves and others.
• Students demonstrate empathy.
• Students recognize the importance of and demonstrate respect.
• Students develop skills to recognize, understand, and address/resolve interpersonal conflict.
• Students develop collaborative skills.
• Students engage in cooperative learning, and work toward group goals.
• Students develop leadership skills.
• Students resist inappropriate/negative social pressures.
• Students develop constructive relationships with students and adults.
• Students engage in the school and community and at home.

Competencies that support Decision Making
• Decision making refers to the ability to develop appropriate strategies to solve problems, whether academic, personal, or social.
• Students identify problems when making decisions and generate alternatives.
• Students develop and refine self-reflective and self-evaluative skills.
• Students make decisions based on moral, personal, and ethical standards.
• Students understand how responsible decisions can affect themselves and others, the school, and the community.
• Students understand the importance of equity and social justice.
• Students develop skills to negotiate fairly.

Citizenship

Civic Engagement
• Civic Engagement is concerned with student *agency* (the idea that citizens working individually and in groups can make a difference) and *responsibility* (citizens have an obligation to engage to make society better).
• Students address societal issues of importance through opportunities to participate in their formal political system, civil society organizations and grassroots/community organizations.
• Students understand how they can influence change(s) in society through participation.
• Students address issues of importance in their school through a formal student governance process that contributes to school policy and decision making.
• Students express beliefs about themselves as citizens within a State.
• Students iteratively and progressively develop opinions about key concepts of citizenship and each concept's fluidity in the following ways within *Civic Knowledge* below.

Civic Knowledge
• There are six key concepts in citizenship: *government by the consent of the governed, fundamental freedoms, diversity, rule of law, loyalty, and responsibility.*
• Students need to learn, use and express these concepts as follows:
• Students understand what each concept means and how each is operationalized.
• Students understand the implications of each concept in current affairs in society.
• Students understand how each concept changes and is operationalized over time and across contexts.
• Students understand points of tension and disputes around each concept.
• Students can articulate a position on how each concept should or could be operationalized.

Civic Dispositions/Attitudes
• Civic dispositions are a set of personal attitudes, which enable individuals to be effective citizens. They cluster around areas of identity, responsibility, respect for diversity, and trust. Civic dispositions are well substantiated across the social emotional learning competencies (see Social-Emotional Learning Competencies)

Civic Skills
• Along with skills common in many areas of schooling—reading, writing, listening, speaking—civic skills are closely associated with creative competencies that support student capacity to imagine, persist, and critically reflect (see Creativity Competencies). While related to other domains, there are two skills specific to citizenship:
• Students synthesize; offer compromises; and create commonalities amongst and between diverse and/or conflicting ideas and points of view.
• Students distinguish between, assess, and effectively employ empirical and normative arguments distinguishing the distinct elements and claims of each.

Health

Competencies that support student engagement in physical activity for fitness and pleasure
• Students develop physical fitness, including: Cardio-respiratory endurance., Muscular strength., Muscular endurance. Flexibility.
• Students develop the movement skills needed to participate in a range of activities.
• Students learn concepts such as body and spatial awareness, center of gravity, laws of motion and force.
• Students practice movement strategies such as activity appreciation, tactical awareness and decision making in their performance to develop movement principles and concepts.

Competencies that support capacity for students for making healthy choices
• Physical activity: students learn how to develop physical fitness and gain an understanding of the importance of regular physical activity and its relationship to developing and maintaining health-related fitness.
• Eating: students acquire knowledge and a sense of responsibility for healthy eating choices.
• Sleeping: students learn about the importance of sleep for health and learning, about factors that put their sleep at risk and about good sleep hygiene.
• Risks: students learn to assess the risks associated with the health choices they make.
• Students have a sense of personal responsibility for their own health.

Competencies that support student well-being in relation to sexuality
• Students develop a secure sexual identity.
• Students respect the sexual identities of others.
• Students understand the importance of intimate relationships that are caring, respectful and non-violent.
• Students understand the role of social media in sexual health and how to be respectful and responsible in that context.
• Students have the capacity to manage risks make good decisions regarding their sexuality.

Competencies that support students' understanding and management of mental illness
• Students are informed about mental health issues.
• Students recognize emerging mental health issues in themselves and others.
• Students are able and willing to seek help for mental health issues for themselves and others.
• Students feel safe and included at school.

56 conditions

Conditions in classrooms

Classroom environment

- The classroom is welcoming, inclusive, psychologically safe and energetic: students want to be there.
- Student voice and experiences are recognized as knowledge and integrated within working operations of the classroom and the classroom curriculum.
- There is a natural oscillation between a buzz of activity and a working silence. Students characterize their work in class as both interesting and engaging.
- Risk-taking is rewarded.
- Students are primarily driven by intrinsic motivation.
- Failures are embraced as opportunities for new learning by both teachers and students.
- Expectations for students are high, but not unrealistic.
- The teacher takes risks—mistakes are made visible to the students.

Learning and assessment opportunities

Classroom activities:

- are culturally relevant and responsive, and problem-oriented.
- require exploration or imaginative ideas.
- allow time for students to be inquisitive.
- require persistence.
- are balanced between open problems—where there are many potential 'right' answers and closed problems in which specific information is required.
- support student meta-cognitive development.

- Learning experiences in classrooms are integrated with wider school and community experiences for students and adults.
- Learning experiences promote the development of empathy, peaceful conflict resolution, and responsible decision making.
- Learning experiences are balanced and diverse – they include collaborative discussion, direct instruction, and individual and small group work.
- Learning experiences are balanced between pre-planned structure and improvisation in response to serendipitous moments.
- Open-ended discussions are designed to enhance social, emotional, ethical, and intellectual development.
- Classroom activities are balanced between direct instruction and student-initiated direction—students are encouraged to follow their personal interests within the broad framework of any given curriculum area.
- Peer relationships are a central part of ongoing work in classrooms.
- Student learning is expressed through a variety of forms such as oral, written, visual, musical, theatrical, and through demonstration, debate, and multimedia works.
- Formal assessment explicitly includes diverse forms of expression.
- Student competencies in Citizenship, Creativity, SEL and Health are assessed within relevant subject areas and tasks. However, evaluation is judicious, not everything is evaluated.
- Students have opportunities to assess their strengths and limitations, and to discern which approach to learning is best in any given situation.

Conditions in the school

The operation of the school mirrors ideals of citizenship in democratic societies. Social relationships, characterized by trust, interdependence and empathy amongst all members, are centrally important to the schools overall focus. Imagination, experimentation and risk-taking are all part of a creative pedagogic for teachers and students. These ideas are exhibited in the following ways:

- School leadership prioritizes staff motivation and commitment, the school's instructional program, and developing teachers' capacities for leadership.
- School leadership is characterized by shared authority through team-based collaborative work with high levels of trust and interdependence. Staff and student voice are part of school-based decision making.
- Professional learning for educators is embedded in ongoing professional work and:
  - informs school direction, vision and strategy.
  - is integrated within educator teams' ongoing meetings.
  - is self-directed and collaborative.
  - is connected to student learning experiences through a variety of student data and information.
  - addresses specific needs of Citizenship, SEL, Health, and Creativity.
  - uses available expertise within the wider community.
- Teachers' out of classroom collaborative work relates to and corresponds with the daily work flow of teachers, such as planning time, assessment periods and parent meetings.
- Student input on school and classroom decisions and strategy is elicited and used.
- The school builds student civic agency through active student governance and committee processes that influences decision-making, informs change, and creates school policy.
- The school is an open learning space in which community members outside of the school with diverse interests and resources/expertise work with students and staff.
- The school ethos promotes mutual respect and equality of opportunity and encourages the active participation of pupils in all aspects of school life.
- Social interaction in the school models effective social relationships, where students learn about and put into practice attributes such as respect, responsibility, fairness, and empathy.
- School hallways, libraries, cafeterias and schoolyards are all recognized as learning environments.
- Adult-student and peer relationships across the school are recognized as important informal learning moments that can be connected to relevant formal learning within the classrooms.
- School-based structures are in place to identify and provide support for students dealing with social, emotional, learning or mental health problems/disorders.

Conditions beyond the school

Relationships between school and community

- Clear and mutually beneficial agreements exist between schools and their community partners.
- The school has designated member(s) of staff with responsibility for coordinating, monitoring and reviewing learning through community involvement in and beyond the school.
- Meaningful school—community partnerships have active involvement of both educators and community members (including parents).
- Schools work with external health services or community agencies to access treatment for students with mental health disorders.
- Curricula being taught in classrooms are linked to school—community joint learning projects.

Learning Opportunities for Students Provided by the Wider Community

- Meaningful, enriched learning relationships are cultivated with community members and organizations that co-create conditions that foster creativity, citizenship, health and social-emotional learning
- Student civic engagement is supported through student participation in a variety of community organizations, political advocacy and formal politics.
- Students are actively involved in contributing to communities and applying an understanding of diversity while respecting others across different contexts.
- Community members (including parents) mentor students during and beyond the scope of any given project.
- Monitoring and reviewing of domain competencies in relation to student learning and school practices takes place and involves relevant wider community membership, e.g., artists, health practitioners, grassroots community organizations, and parents.
- Students are aware of, and can access, programs and services available to them in their school and community to support their social and emotional development.
- There is a focused effort on developing strategies for healthy and respectful relationships throughout the school and surrounding community.
- Programs that de-stigmatize mental illness, prevent bullying/aggression, build resilience, and prevent substance use are implemented.
- Programs are evidence-based and evaluated after implementation.
- Programs involve the whole school community.

Review of curriculum and policy

- **Domains are widely represented in existing curriculum and policy**

- **Form critical components in Ontario's new education goal of student well-being**

- **Little substance provided in how and what these critical areas look like in practice and evaluation**

Measurement scan

# domains	Out of 36 tools
1	24
2	7
3	3
4	0
5	0
No domains	2

24/36 instruments are related to social-emotional learning

6/36 of the instruments are related to each of the remaining 4 domains: creativity, citizenship, health, and quality learning environments.

Case study questions

- What are the implications of using the five domains and related competencies and learning conditions as a framing and evaluation tool?

- What are some interrelationships between and across the five domains, as expressed in school and school district practices?

- How and in what ways do the definitions of the competencies and conditions articulated in the MWM framework translate into learning experiences in classrooms?
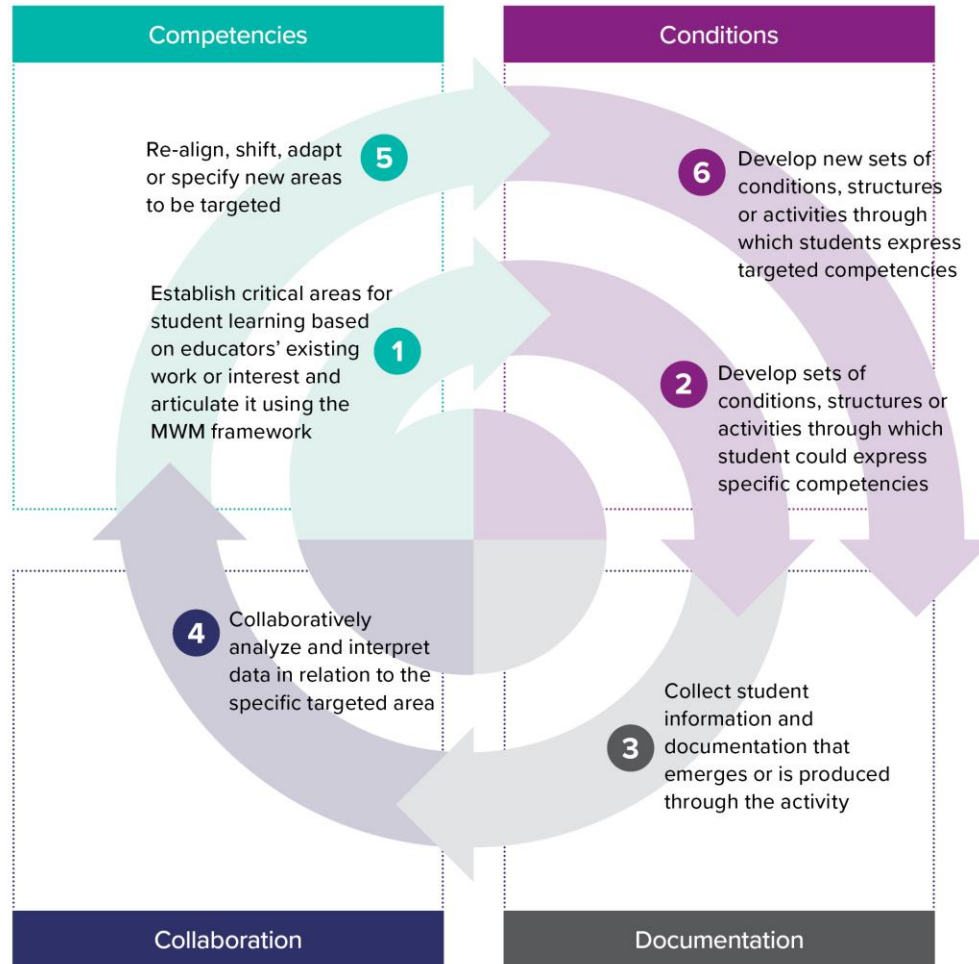
Partner schools

- 26 schools: 3 Catholic, 2 French public, 21 English public

- 6 secondary schools, 20 elementary schools

- 60-70 educators and 8 school district-based educators

- Urban-rural: 8 rural schools and 18 urban schools

- Regional participation: south, north, central and west

Methods

- **Semi-structured, descriptive, and participatory**

- **Purposive and convenience sample**

- **Observation, interviews, focus groups**

- **Data**

    - Audio transcription

    - Field notes

    - Digital media

Competencies

5 Re-align, shift, adapt or specify new areas to be targeted

1 Establish critical areas for student learning based on educators' existing work or interest and articulate it using the MWM framework

Conditions

6 Develop new sets of conditions, structures or activities through which students express targeted competencies

2 Develop sets of conditions, structures or activities through which student could express specific competencies

4 Collaboratively analyze and interpret data in relation to the specific targeted area

3 Collect student information and documentation that emerges or is produced through the activity

Collaboration

Documentation

Preliminary Observations

- **Honouring teacher professional stewardship**
- **Diverse and personalized approaches to assessment**
- **Dynamic nature of learning conditions and student competencies**
- **Interrelationship(s) of competencies and domains**
- **Enhancing inter-contextual meaning through use of a common lexicon**
- **Broadening perspectives on where learning occurs in schools**

A systems-based measurement framework

Inside the classroom

Purposes

- Reporting to students and parents

- Assess individual student progress

- Assess and inform classroom conditions

- Inform teacher practice

Possible Methods

- Integrate competencies into marking rubrics

- Include in report cards

- Classroom documentation

Competencies e.g.

- Students ask for evaluative input from peers and teachers (Creativity)

- Students adapt to mood of a group and respond constructively (Social-Emotional Learning)

Across the school

Purposes

- To inform practice

- To inform strategic direction, school plans

- To report to community on learning environment

- To support collaboration

Possible Methods

- Collaborative teams share student assessments

- Surveys, metrics to measure school conditions

Competencies e.g.

- Student governance contributes to school based policy making (Citizenship)

- Classroom curricula are linked to school-community joint learning projects (Quality Learning Environments)

Jurisdictional

Purposes

- Public reporting
- Accountability
- Inform strategic direction and planning
- Inform policy and funding

Methods

- Use sampled environments to assess competency-related content including numeracy and literacy
- Self-report surveys

Competencies (e.g.)

- Students generate a range of ideas in relation to a particular context (Creativity)
- Students assess risk of social danger and respond appropriately (Social-Emotional Learning)

Our working questions

- **How can schools embed these broad competencies and conditions into all aspects of schooling as foundations for learning?**

- **Are there key 'tell' competencies that speak to the bigger ideas?**

- **Can we use a selection of competencies/conditions that are amenable to jurisdictional measurement but do not become over privileged in classrooms and schools?**