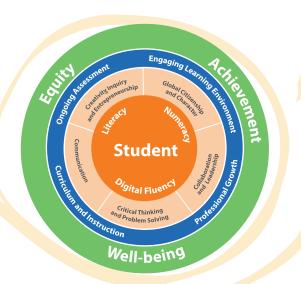


# Our Educators' Guide to School Improvement and School Effectiveness

September 2016

## Improvement for all Students



Enhanced Learning Culture



Shared Leadership





Leadership that Engages and Empowers All

As Canada's largest school board, we are always looking for ways to improve our system so that all students, staff, parents/guardians and members of the community feel connected, involved and supported. That's why we've introduced a new strategy to improve the effectiveness of our schools, make us more responsive to the needs of our communities, and increase student achievement and well-being.

The creation of four new Learning Centres is one of the key elements of this new strategy. Starting in September 2016, all TDSB schools will feed into one of four Learning Centres. Learning Centres will be hubs where staff can collaborate and share resources. They will be closely connected to the schools they support and will be able to better serve the needs of school staff, students and parents/guardians.

Learning Centres will be guided by our strategic directions:

- Make every school an effective school
- Build leadership within a culture of adaptability, openness and resilience
- Form strong and effective relationships and partnerships
- Build environmentally sustainable schools that inspire teaching and learning
- Identify disadvantage and intervene effectively

#### **Our Strategy**

We will share leadership to enhance the learning culture that supports improvement for all students in the TDSB. Shared leadership is the creation of conditions in every school, department and across the system that:

- Honours the experience and expertise of all
- Creates processes so that everyone has appropriate influence aligned with their expertise
- $\bullet$  Understands the importance of Professional Capital-Social, Human and Decisional  $^1$ 
  - o Social the wisdom that emerges from the group
  - o Human the personal talents each member of the group brings
  - o Decisional the positive impact when everyone is included and can "own" the decision because we cultivate expert judgement in all staff members, informed by evidence
- Realizes that decisions are not always healthy when they are made at the "top" but may lack important direction if they are only made from the "ground"
- Recognizes that formal leaders, such as principals or superintendents, play a significant role so that optimal conditions for learning exist and that efforts are coordinated

We will foster a collective commitment to continuous improvement and internal accountability. This enhanced learning culture means that:

- Everyone in the organization desires to learn in teams and this learning leads to the ability to solve very challenging issues.
- Everyone is willing to be professionally vulnerable. This means that they share their wisdom AND they share what they do not know.
- Every school and department throughout the TDSB holds high expectations for staff and students.
- Trust exists in each school, department and throughout the TDSB between all partners and stakeholders.
- Staff has the confidence that together they can make a difference for each and every student.
- Relationships are positive, leading to increased engagement and empowerment of students, staff, parents and communities.
- Schools and departments learn from each other and a strong partnership exists between school, Learning Centre and system leadership.

**Students** 

Staff

Parents Communities

Sharing Wisdom to Enhan

Has a voice

Shorthous Everyone

Everyone

Everyone

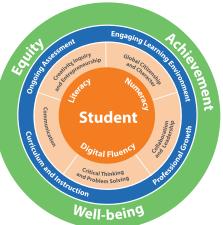
Can "own"

 $<sup>^{</sup>m 1}$  Andy Hargreaves, Michael Fullan, Professional Capital, Transforming Teaching in Every School

#### **Improvement for All Students**

We are asking each school to engage in a process to determine a learning focus in three areas: **achievement**, **well-being**, **and equity**. This process will include identifying these three focus areas, engaging in the learning that will allow each school to support student improvement in these areas, determining the evidence/data the school will collect, monitoring progress, and reflecting on what is happening in an ongoing way to support next steps.

All departments will support this effort in a responsive way by examining their own processes and procedures to be sure that they are providing a high standard of service to the schools. In this way, the focus on learning will not be interrupted.



#### **Achievement**

Our students need to be deep thinkers, problem solvers, creators, collaborators, leaders, global citizens, entrepreneurs, and communicators. The global competencies our students require are changing the learning process. Therefore, our students and teachers need to be deeply engaged in the learning process, leading to positive results.

Literacy and math are important foundations for our work. Important skills such as the ability to read by the end of Grade 1 are required for further learning. Teachers need to be able to figure out where students are in math so that they know how to plan the instruction effectively. Technology is also changing our world and students need to be digitally fluent.

What will the achievement focus for your school be moving forward? What does staff need to learn in order to fulfill this goal?

#### Well-being

Our students need our collective support to be healthy individuals who possess a "positive sense of self, spirit and belonging that we feel when our cognitive, emotional, social and physical needs are being met" (*From the Ontario Ministry of Education discussion paper 2016*). The classroom environment impacts well-being. The relationships our students have with each other and with adults are key, and every student needs peers and a caring adult to turn to as they learn how to deal with life's challenges. Developing optimism, self-confidence, resilience and a sense of belonging in our students is essential to their success.

We need to promote positive mental health, safe and caring schools, healthy schools that understand the importance of physical health, nutrition, and physical activity, and inclusive schools that are responsive to all as we celebrate the diversity in our communities. Educators need to partner with parents/guardians effectively to support our children. We must strengthen our partnerships with community agencies to support our students when their needs exceed what we are trained to provide.

What is an important goal that will increase the well-being of the students at your school? What do staff need to learn in order to move forward with this goal?

#### **Equity**

Our goal is to improve student achievement and well-being for each and every student in the TDSB. All students deserve to graduate as a foundation for the next successful chapter of their lives after high school. In order to fulfill this goal, we will need to work closely with our students and their families as well as our communities to determine what needs to change in order to make this commitment a reality for all TDSB students. This commitment to equity requires that we engage in challenging conversations not only at the system level but at each and every school. At the school level, staff are asked to engage in important dialogues that include some of the following questions:

- What barriers exist in the school that might be keeping students from achieving?
- What bias might persons in the school possess about what certain groups of students are able to achieve?
- What needs to change in terms of the instruction, the environment in the school, and the relationships in the school so that achievement and well-being will improve for all students?
- How might our parents and communities assist us in this endeavour?

Each school will be supported to have this dialogue to identify an area of focus. Staff will be supported through learning opportunities to support this improvement.

#### Why Are We Doing This?

Our students deserve learning environments that lead to improved outcomes in achievement and well-being. By clarifying our strategic plan, we are minimizing distractions, supporting our staff in responsive ways and monitoring our progress. Staff in each school will own this learning process supported by the system. The system will be responsive and focussed on improving service standards.

#### How Will We Do This?

Our Learning Centre Strategy is bringing resources closer to schools. This strategy will give more authority to superintendents in the learning centre, supported by the executive superintendent, so that decisions can be made quickly. When more challenging issues exist, the executive superintendent in each learning centre will assist the superintendent to determine the best way to respond to our students and our families.

The voice of the school and community will influence system direction more effectively through a strengthened relationship between the superintendent and the principal working in partnership with the trustee and the executive superintendent. The Ministry and Board direction will be more effectively communicated to our school communities. This mutual relationship between the TDSB and each individual school community is intended to be more reciprocal in terms of how both influence the other.

Standards of service excellence will be developed. Each department in the TDSB will be expected to achieve these standards.

Our goal is that principals and vice principals will be able to take more responsibility for the improvement that needs to happen in their school, and feel that the TDSB is responsive to what their students, staff and community need. We understand that we will not always be able to respond in a way that the school wishes; however, the school can expect to receive a response with a rationale.

Another goal is to work effectively with each trustee so that the voice of the community as well as the staff influences our work in particular schools, leading to improved student achievement and well-being.

Finally, our goal for parents/guardians is that we support students in our schools so that we are serving them effectively. If issues arise and parents/guardians have concerns, the principal feels supported to work through these concerns. If the concern continues to exist, our superintendents have the ability to consult, collaborate and listen, and then resolve the issue in collaboration with the parent and principal, while always keeping the school's trustee informed of what is happening.

We believe the Learning Centre Strategy will support everyone more effectively because of the relationships that will form through the centres between system staff, school staff, parents/guardians, communities and trustees.

By focusing on system barriers that impact student success and creating important learning opportunities for superintendents, principals and vice principals and all of our instructional coaches, consultants and coordinators, we will improve achievement and well-being for all students.

Sharing leadership with all staff in coordinated ways is pivotal to our work. In order for this shared leadership model to be effective, all staff are committed to learning and continuous improvement. By collaborating together, the staff at each school will be able to meet the needs of each student. By leading together, the staff will be able to persevere in the face of any challenges, leading to improved outcomes for students.

We have learned a lot from our District Review Process over the last number of years. Our District Review Process consisted of a team of educators visiting a school to conduct a formal review based on the goals of the school. As we move forward, we will continue to employ the lessons we have learned from the District Review Process through administrator learning teams that will be able to visit schools more often and in less formal ways as part of the process to support one another.

We will create concrete system measures to monitor our progress and we will also support our schools to monitor their progress as well.

#### **Our Expectations**

- Removal of any bias and systemic barriers that are hindering student achievement and well-being
- All students reading by the end of Grade 1
- All staff learning in teams leading to improved instruction and service
- All students experiencing a sense of belonging in their school, supported by a caring adult
- All students experiencing deep learning opportunities, supported by technology, leading to improved achievement
- All students graduating

In conclusion, our way forward will focus on leadership, learning culture and improvement, as described above. By enhancing ownership for this process at the school level, supported by the Learning Centres and coordinated by the TDSB, we will move forward in improving student achievement and well-being for each and every student (equity). We are not afraid to challenge those things that are standing in the way of this goal because we are working together and supporting each other effectively. Leadership that engages and empowers all will enhance our learning culture and our students will improve.

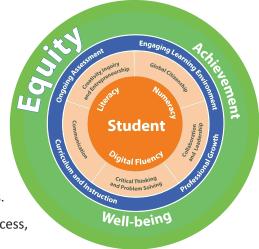
In the second section of Learning and Leading in the TDSB, we have provided greater clarity to how we will achieve our strategic goals together, leading to positive outcomes for our students, staff, parents/guardians and communities.

#### **Our Commitment is Equity of Access and Outcome for All Students**

TDSB is committed to creating an equitable school system where the achievement and well-being of every student is fostered through rich, culturally authentic learning experiences in diverse, accepting environments where all are included, every voice is heard, and every experience is honoured.

As part of the School Improvement Process, each school will determine a learning focus in three areas: equity, well-being and achievement. In addition to identifying the three focus areas, this process will include engaging in the learning to support student improvement in these areas, determining the evidence and data to be collected and monitoring progress.

Aligned with the Learning Centre Strategy and the School Improvement Process, principals and vice principals at each TDSB school will:



1. Identify a goal in the areas of equity, well-being and achievement. This includes consideration of content, pedagogy, access and climate, and takes into account school climate, safe schools, demographic and achievement information.

#### Content:

- What are we teaching (curriculum)?
- How do we ensure the curriculum is inclusive and includes a variety of knowledge of all peoples as the basis for instruction?
- Whose voices are missing and how do we change that?
- How do we ensure students acquire the skills and knowledge that enable them to challenge
  unjust practices, and to build positive and healthy human relationships among their fellow
  students, and among all members of society?

#### Pedagogy:

- How do we encourage and support student voice?
- How do we demonstrate commitment that all students are capable of learning and achieving?
- How do we engage in conversations about bias and who is achieving/not achieving?
- How do we demonstrate commitment to equity and inclusion?
- How do we engage in culturally relevant and responsive pedagogy?
- Do we employ a variety of assessment strategies as well as instruments used to inform short and long-term planning to reduce gaps in student achievement and improve student learning and well-being?
- Do we support co-curricular activities that offer students opportunities to achieve success outside the classroom that can contribute to their engagement in learning and success inside the classroom (e.g. before and after-school child care and/or programs that are focused on sport, recreation, the arts, and culture)?

#### Access:

- What are the physical barriers to access (e.g. washrooms, ramps, site safety, special needs equipment, breakfast programs, etc.)?
- Are there social barriers to access (e.g. language, information and data collection, dress codes, school fees, social emotional supports, etc.)?

#### Climate:

- How do we ensure the school environment is welcoming for all (students, staff, parents/ guardians, and community)?
- How do we support student engagement opportunities?
- Do students see diversity and equity represented widely?
- How do we ensure students have input into dress codes and school codes? Is safety an issue?
   Is there a means of safe reporting? Do students understand the causes and impacts of inequity in society, and understand the similarities, differences, intersectionality of multiple social identities and the connections between different forms of discrimination?
- 2. Determine plans for eliminating gaps that may exist for identified demographic groups (e.g. achievement, opportunity, participation, safety, and climate) and report these plans to the Superintendent of Education.
- 3. Share student data disaggregated by demographic categories, with staff, parents/guardians and school council to promote an understanding of school improvement efforts aimed towards the elimination of existing gaps.
- **4.** Determine the evidence and the data the school will collect to improve student success.
- **5.** Engage in the learning and the comprehensive use of student data for school improvement planning, assessment and modification of practices, monitoring school effectiveness and accountability.
- 6. Participate in job-embedded professional learning.

Principals and vice principals will take responsibility with their entire staff for the improvement that needs to happen in their school and ensure the TDSB is responsive to what students, staff and communities need.

#### **Using Data to Inform Decision Making**

Principals, vice principals, and teachers play a critical role in the School Improvement Process. To support their efforts, the TDSB's Research Department and other associated units offer individual schools with rich sources of data and information to help them:

- understand who their students are (e.g. demographics, special needs)
- determine the strengths and needs of their overall student population and sub-groups
- monitor the progress of their students
- prioritize their areas of school focus
- inform their school improvement planning and programming

The main types of data and information made available at the school level include, but are not limited to, the following: 2

Demographic Data	Achievement Data	Well-being/Experiential Data
<ul> <li>School Information Systems</li> </ul>	• EQAO	Student & Parent Census
Student & Parent Census	Report Card data	School Climate Surveys
• Data on students with special	Student Success Indicators	Safe Schools data
education needs	(secondary school)	Early Development Instrument
		(EDI for students in Kindergarten)

<sup>&</sup>lt;sup>2</sup> Most of these data sources are accessible through the Student Success Dashboard: <a href="http://tdsbweb/\_site/ViewItem.asp?siteid=10513&menuid=36306&pageid=30699">http://tdsbweb/\_site/ViewItem.asp?siteid=10513&menuid=36306&pageid=30699</a>.

As mentioned previously, schools will also determine other evidence that will be collected and will become the foundation for continuous learning and improvement.

To further provide in-depth information for school leaders, the data sources have been tracked, and analyzed so that patterns, trends, and gaps related to equity, achievement, and well-being are identified. All these research findings and data are shared with and made accessible to individual schools in several ways:

- <u>Student Success Dashboard</u> with comprehensive achievement data and guiding questions for interpretation and decision making
- Special school reports (e.g. Census School Reports, School Climate School Reports, EDI School Reports, etc.)
- A wide range of research reports, Research Today (articles), and periodic fact sheets downloadable from TDSB's internal and external websites<sup>3</sup>
- System-wide workshops to support school leaders to unpack their school results (e.g Student and Parent Census, and EDI) for planning and programming purposes

## Existing Data Sources for Improvement Planning Teams

School Improvement Teams have access to available system-wide data and research reports, including:

- School Effectiveness Framework
- Student Success Dashboard
- Demographics and Achievement Reports
- School Climate Reports
- Absenteeism Reports
- EQAO Reports
- · Census Reports
- Research Reports & Fact-Sheets

It is important to note that understanding the data is one part of the challenge as we improve student achievement and well-being for each and every student. Knowing what to do for each and every student, based on the data, is the crucial component to this improvement discussion. In other words, we need to apply effective instruction and appropriate interventions in precise ways, aligned with what the data is telling us, in order to help all students achieve. Knowing what to do in light of this data is the focus for all staff in the school.

With a goal to improve student achievement and well-being for each and every student, principals, vice principals and teachers work closely with students, their families and our communities to determine what is needed to make this commitment a reality. We are committed to collective action through informed conversations not only at the system level but at each and every school. This includes identifying the beliefs, practices, programs, and structures that may hinder student achievement and well-being.

By engaging in data-driven dialogue, principals and vice principals are able to engage staff, students, and parents/guardians to work collaboratively to build action plans for equitable and accepting schools that promote a sense of belonging, support and well-being and help eliminate barriers to success.

Data-driven dialogues allow school teams to unpack the following:

- What barriers exist in the school that might be keeping students from achieving?
- What bias might persons in the school possess about what certain groups of students are able to achieve?
- What needs to change in terms of the instruction, the environment in the school, and the relationships in the school so that learning, achievement and well-being will improve for all students?
- How might parents/guardians and communities assist in this endeavour?

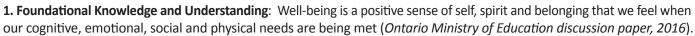
<sup>&</sup>lt;sup>3</sup> These publications can be downloaded from <a href="http://www.tdsb.on.ca/research/Research.aspx">http://www.tdsb.on.ca/research/Research.aspx</a>.

#### **Well-Being**

Students cannot achieve academically if they don't feel safe or welcomed at school, if their mental health is at risk and if they don't have the tools or motivation to adopt a healthy, active lifestyle, both inside and outside of school. Children who have a positive sense of well-being are more resilient and more successful as learners (*Ontario's Well-Being Strategy for Education, 2016*).

When considering an authentic well-being improvement goal during the school improvement process, consider the following:

- 1. Foundational Knowledge and Understanding in Well-being
- 2. Environment Learning Conditions
- 3. Sense of Belonging Relationships
- 4. Student Engagement Voice and Leadership
- 5. Parents/Community as Partners



#### All staff need to:

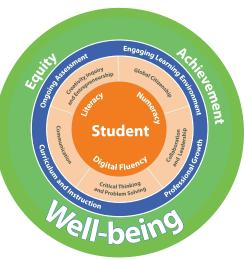
- Learn basic information about student well-being, and the role of students in creating healthy learning environments.
- Understand using a tiered approach (all, some, few) (<u>Supporting Minds Page 144</u>).
  - The tiered approach is readily applied to student mental health. It calls, first for the creation of a positive and supportive environment in the school and classroom that will benefit all students, second for prevention programming for students at risk and third for intervention, including outside referrals, for students in distress.
- Be aware of the signs and symptoms when a student may be struggling.
- Know the TDSB pathways to care and enlist Professional Support Services to support students in need.
- **2. Environment/Learning Conditions**: A healthy school environment is important for all students' sense of well-being and belonging, but is essential for those most vulnerable. The learning conditions should support the four domains of well-being: physical, cognitive, emotional and social.

#### All staff need to:

- Provide social emotional learning opportunities that recognize and embed equity and diversity.
- Be caring and informed adults in the lives of students.
- Understand the uniqueness of student needs (e.g. appreciating that expectations are adjusted accordingly).
- Cultivate positive relationships between students, staff, parents and community.
- Provide opportunities for recognition, success, involvement, and a sense of contribution and competence.
- **3. Sense of Belonging Relationships**: Belonging is feeling accepted, respected, included and supported by others at school (*Carol Goodenow, 1993*). Relationships and a sense of belonging are foundational to student achievement and engagement. It is important to be present, visible, and approachable.

#### All staff need to:

- Model and create respectful and caring relationships that allow students to flourish.
- Model personal well-being for staff and students.
- Recognize the importance of equity and diversity in fostering a sense of belonging.
- Create a sense of hope by letting students know that they matter.
- Foster a sense of belonging which has been shown to improve a student's ability to learn and increase relationship building skills.
- Help students feel included, which helps to develop a sense of pride, which not only enhances confidence and also develops an appreciation for the differences in those around them.



**4. Student Engagement - Voice and Leadership**: The voice of students plays an integral role in engagement and mentorship. Students offer a unique perspective that contributes to promotion of a healthy and positive youth environment.

All staff need to:

- Engage collaboratively with students to help develop effective mental health and well-being awareness in schools.
- Take the time to listen, to build trust, to understand specific needs, and to build solutions together.
- Acknowledge the important role that student leadership plays in promoting the importance of well-being.
- **5. Parents/Community as Partners**: Model a commitment to collaborative work by building respectful, trusting relationships within the school, with families, staff and community partners to reflect an understanding that the development of protective factors and resilience in children and youth is a shared responsibility.

All staff need to:

- Understand that authentic consultation and collaboration with staff, community and families is necessary to foster well-being in students.
- Have open and meaningful communication with parents, staff and community members to build on each other's knowledge, skills and strength to help develop capacity.

Working collaboratively with school well-being teams and Professional Support Services, school staff will assist with determining an authentic focus in well-being that is rooted in an understanding of the student population and is linked closely to achievement and equity. The use of data around well-being and social-emotional aspects should take into consideration the "whole child" and be focused on student strengths. Listening to students and engaging them in the process is important, as is the involvement of parents/guardians.

It is also important for principals and vice principals to gather student and school data from different sources such as, student attitude surveys, positive school climate surveys, achievement data, attendance data and suspension data to better understand who their students are and to determine needs.

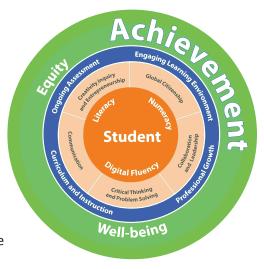
In building capacity around a well-being focus, consideration needs to be given to supporting staff awareness and knowledge building in this area. Existing resources such as the Children and Youth Mental Health and Well-Being Strategy, School Mental Health ASSIST resources, such as Supporting Minds and Leading Mentally Healthy Schools, as well as other resources can be found at <a href="https://www.tdsb.on.ca/mentalhealth">www.tdsb.on.ca/mentalhealth</a>. Professional Support Services staff can also provide learning opportunities for staff. Once a learning plan is in place, based on staff needs, principals and vice principals should monitor progress by engaging in daily classroom learning walks, student observations, and by reassessing and adjusting their actions accordingly, if needed.

Staff well-being is also an integral part of student well-being. Staff well-being is enhanced when input is valued and when staff understand how they are contributing to student success. Good communication, shared leadership, and a trusting learning environment are critical. We have a collective responsibility to create healthy learning and work environments that contribute to lifelong learning (*Ontario's Well-Being Strategy for Education, 2016*).

#### **Achievement**

The TDSB's Vision for Learning is a comprehensive plan to help improve student achievement, well-being and equity by supporting the use of deep learning practices and technology integration in the classroom. Providing students with an improved learning environment focussed on authentic, real world learning practices is critical for success, as it will help students develop key global competencies and improve core learning skills such as literacy and numeracy.

At the TDSB, we have had success in building this improved learning environment. There are examples across the system of how deep learning practices and technologies have been used in innovative ways to improve student engagement and success rates. These new teaching and learning practices have already had a transformative impact, helping to unleash the potential in both students and educators.



Through the use of new learning partnerships between students and teachers, increased adoption of deep learning tasks, and use of digital learning tools and resources, students are becoming actively engaged in their education and in the learning process. This helps to stimulate and motivate students, as they have greater control of their learning, are able to connect to and explore the real world during the learning process, and can set personal learning goals based on aspirations. At the same time, the relationship between students and teachers helps to unleash the potential of teachers as they adopt new and dynamic roles while partnering with students during the learning process.

The Vision for Learning Framework will help support and build on this work by ensuring that we continue to transform our teaching practices and provide equitable access to technology tools and resources in the classroom. The plan will involve changes to the traditional ways that we do things at the TDSB, including dynamic learning partnerships between students and educators and the use of technology-infused, inquiry-based learning processes. It is an ambitious plan but the benefits for student learning and achievement are worth the effort.

As we focus on building goals for student achievement, equity and well-being, it is important to support deep learning practices and rich technology integration in the classroom and to continuously work towards removing obstacles to student learning.

#### **Guiding Question**

How can schools determine a learning focus for achievement that includes an understanding of deep learning and technology?

#### What is deep learning?

The main idea behind deep learning practices is that students learn better when they are more engaged and have a better grasp of the learning process. The focus is shifted from passively acquiring knowledge to active discovery of content and meaning by exploring and solving real world problems. This new approach to learning is better suited for modern learners, as it provides students with learning skills that help them compete effectively in a globalized, interconnected and technology-infused world.

In this new learning environment, classrooms become student-centric learning environments, with students taking greater control of their learning and teachers acting as partners, collaborators and facilitators to help guide students through the process of learning how to learn. The relationship between the classroom and external world is also changing, as students are becoming virtually connected to and immersed in the world beyond the classroom and school.

Deep learning is being applied in the classroom through a focus on problem and inquiry-based learning, where students work in project teams focussed on solving complex and authentic real world problems while using and improving their literacy and numeracy skills. Using a set of technology tools in physical and virtual learning spaces, students work collaboratively to solve problems. They become globalized learners and thinkers and gain a range of global competencies, such as critical thinking, creativity, collaboration, and entrepreneurship that better prepare them for post-secondary choices and to adapt to a highly competitive working environment.

#### How does this work in the classroom?

Students are organized in project teams and given problems that they must investigate and solve. Teachers ask questions or set problems that can be applied to the world that exists beyond the classroom. For example, math questions could be framed to use algorithms and rational analysis to address economic, scientific/technological or environmental problems and literary questions could be framed to apply to modern social, cultural or political contexts. As they carry out the process of inquiry, students are expected to review, analyze and evaluate their learning progress, working together with their teachers to adjust strategies and goals as required.

By challenging students to explore and answer complex questions in teams, they become more engaged and active in the learning process and it is more stimulating, tactile, and authentic. They explore problems that they see and read about outside of the classroom and use familiar technologies. Students learn key critical thinking skills by actively, rationally and systematically investigating every facet of the problem and gain key social and interpersonal skills by working with others. The ideas, knowledge, meaning and products that come out of this discovery process are more tangible, understandable, and meaningful because they were gained through actively participating in the learning process.

#### **Global Competencies**

#### **Collaboration and Leadership**

By working collaboratively in teams, students learn from and teach each other, discover how to successfully navigate digital learning spaces, collectively participate in the creation of new ideas, knowledge and content, develop a mix of key cognitive and social skills (critical thinking, problem solving, leadership, empathy, adaptability, etc.), and gain practical knowledge and experiences.

#### **Guiding Question**

How can students learn from, and contribute to, the learning of others through participation in collaborative project-based learning teams?

#### Students are expected to:

- Learn from, and contribute to, the learning of others <sup>4</sup>
- · Co-construct knowledge, meaning, and content
- Assume various roles on the team
- Network with a variety of communities/groups
- Respect a diversity of perspectives

#### **Critical Thinking and Problem Solving**

Students will engage in problem and inquiry based projects to investigate and solve complex real world problems using critical thinking and problem solving skills and a wide variety of digital tools and resources. By conducting detailed research, critically analyzing and evaluating problems and evidence, understanding and processing patterns and making connections, and thinking in a systematic way, students will learn strategies for effective decision making.

#### **Guiding Question**

What is required to engage students in learning environments and experiences which enable critical thinking and problem solving?

<sup>&</sup>lt;sup>4</sup> 21st Century Competencies: Foundation Document for Discussion: Phase 1 Towards Defining 21st Century Competencies for Ontario (Queen's Printer for Ontario, 2015), 56.

#### Students are expected to:

- Solve meaningful, real-life, complex problems <sup>5</sup>
- Take concrete steps to address issues
- Design and manage projects
- Acquire, process, interpret, and analyze information to make informed decisions (critical and digital literacy)
- Engage in an inquiry process to solve problems
- Make connections and transfer learning from one situation to another

#### Communication

Students will communicate effectively and authentically using oral, written and nonverbal communication skills in a wide variety of physical and virtual environments using a diverse array of digital tools and resources. In addition, students will also show effective listening skills.

#### **Guiding Question**

What opportunities are learning environments providing students with to communicate effectively in oral and written form, ask questions to deepen learning and communicate using a variety of media?

#### Students are expected to:

- Communicate effectively in different contexts in oral and written form <sup>6</sup>
- · Ask effective questions to acquire knowledge
- Communicate using a variety of media
- · Select appropriate digital tools according to purpose
- Listen to understand all points of view
- Voice opinions and advocate for ideas

#### Creativity, Inquiry and Entrepreneurship

Students engage in collaborative inquiry-based projects working on real world problems and develop creative and innovative ideas, knowledge, and products. In the process, students gain skills in design thinking (exploration, ideation, and experimentation), entrepreneurship, leadership, and real world experiences that can help them in future working environments.

#### **Guiding Question**

How can students have opportunities to solve meaningful, complex, real-life problems? How can inquiry connect to discoveries, concepts and new ideas?

#### Students are expected to:

- Contribute solutions to complex problems <sup>7</sup>
- Develop or enhance a concept, idea or product
- Make discoveries through inquiry and research
- Pursue new ideas to meet a need of a community

#### **Global Citizenship and Character**

Students will use a variety of virtual learning tools to connect with diverse audiences at a global level to develop a deeper perspective, sensitivity to, and respect for human and cultural diversity. Through project and inquiry-based learning, students will become actively involved in addressing issues of human and environmental sustainability in a rapidly changing and interconnected world, helping them to become global citizens. Global citizenship will help students gain an enhanced sense of personal and community responsibility.

<sup>&</sup>lt;sup>5</sup> 21st Century Competencies: Foundation Document for Discussion: Phase 1 Towards Defining 21st Century Competencies for Ontario (Queen's Printer for Ontario, 2015), 56.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Ibid.

In the process, students will develop a broader and more well-balanced set of character traits that will benefit them in their work and personal lives. These include resilience, empathy, confidence, perseverance, persistence and tenacity. These key character traits will help students to deal with and overcome the many challenges and obstacles in life and form the important connections and relationships they need to succeed in life.

It is important to note that these skills and character traits will also ensure that students become productive, active, and contributing members of their communities and societies, helping to work towards the common good of humanity. In this respect, as Fullan notes, students can be considered "radical change agents." 8 Not only do they help to encourage and stimulate positive change and transformation in the classroom and school learning environments, they also become agents of change for the world around them as they carry their knowledge and skills into the real world throughout their lives.

#### **Guiding Question**

Why do learners need to connect? What wisdom can learners achieve from virtual learning?

#### Students are expected to:

- Contribute to society and the culture of the local, global and digital community in a responsible, accountable, and ethical manner <sup>9</sup>
- Engage in local and global initiatives to make a difference
- Learn from and with diverse people
- Interact safely and responsibly within a variety of communities
- Create a positive digital footprint
- Relate to the environment and be mindful of the importance of all living things

#### What technology resources are available to help?

There are a range of technologies available in TDSB classrooms that can be used for deep learning, including mobile devices (e.g. tablets, Chromebooks), communication and collaboration systems (e.g. Google Apps for Education), eLearning systems (e.g. D2L, Google Classroom), virtual learning environments (e.g. Google Hangouts, Skype), interactive whiteboards and digital projectors, and a wide array of digital learning apps, tools, and resources.

Given the significance of technology for deep learning, it is critical for students and teachers to be digitally fluent in the usage of these resources. This includes having an understanding of available tools and how to effectively use the tools in the classroom and during project work to improve student learning. One of the goals for the TDSB's Vision for Learning to provide educators with this required information and with resources to collaborate and share experiences and successes in applying deep learning in the classroom. The TDSB is also working to modernize its network and infrastructure environment to help ensure stable and seamless access to digital learning resources when required.

#### Tying It All Together

Deep learning is the key component that ties together and informs all aspects of the TDSB's Vision for Learning Framework:

- Educators and administrators apply deep learning goals to the learning environment to help improve student achievement, create an equitable learning environment, and focus on improving student well-being.
- Curriculum, instruction and assessment practices are transformed to focus on the development of a more dynamic, fluid and engaging learning environment for our students.
- Educators are given the appropriate professional development to better understand how to enhance instruction and use technology to support this environment.
- Students apply inquiry and problem based learning practices and gain key global learning competencies such as critical thinking, collaboration, communication, global citizenship, entrepreneurship.
- As students begin applying real world learning scenarios to core literacy and numeracy competencies, their achievement in these areas begins to rise.
- Students gain key learning skills and develop a balance of character traits and values that will help support them as they take on the diverse challenges of our modern, globalized world.

<sup>&</sup>lt;sup>8</sup> Fullan, Indelible leadership: Always leave them learning (Corwin, and Ontario Principals Council, 2016).

<sup>&</sup>lt;sup>9</sup> 21st Century Competencies: Foundation Document for Discussion: Phase 1 Towards Defining 21st Century Competencies for Ontario (Queen's Printer for Ontario, 2015), 56.

How do we set achievement goals for our schools that support deep learning and technology integration? Deep learning practices are bringing a transformation to TDSB classrooms, and it is critical for educators and administrators to set achievement goals that take these deep learning practices, and the digital technologies that support them, into account. This will have implications for pedagogy, curriculum, assessment, and professional development.

When setting goals to improve student equity, well-being, and achievement, it is important to factor in how deep learning practices can support these goals.

Here are a few things to consider:

- **Understand** Understand what deep learning is and how it can be applied in the classroom to improve learning competencies and achievement goals and to build a more engaging learning environment.
- **Apply** When selecting goals for equity, achievement, and well-being, try to apply specific actions that support deep learning in those goals, whether it is in enhancements to instructional practices, improved PD, or integration of technology into the classroom.
- **Enable** Focus on ways to remove impediments to learning and enable opportunities for our students to have equitable access to all of the rich, exciting, and transformational learning resources and tools that will help them build global competencies.
- **Engage** Find ways to help improve engagement between students, educators and the broader world outside of the TDSB classroom.
- **Innovate** Try to find creative and innovative new ways to use instruction and technology in the classroom to support deep learning.
- **Collaborate** Find new ways to improve collaboration between educators to help ensure we have an ongoing, productive dialogue on the best ways to improve the learning environment for our students and set the right achievement goals.
- **Trust** Trust in the potential of our students and set goals that allow them to take a measure of control over their learning, whether it is in increased support for project-based learning, or in the greater adoption of technologies that excite, challenge and motivate them.
- **Persist** Be persistent in trying to bring about positive change in the classroom, and don't be frightened of failure, as the deep learning environment is one that embraces creativity, experimentation and growth.

Our students deserve exemplary learning environments and opportunities. Our students deserve to be successful because they each possess talents and skills that can make our communities better as long as educators, working together with parents/guardians, create the right conditions for students to excel in schools that challenge thinking, enhance creativity and build character. It is a privilege for us to serve students.