

# **Program Committee**

Thursday, March 20, 2025 EC-340D & Virtual Meeting

# AGENDA: 6:00 pm

- 1. Call to Order/Roll Call
- 2. Land Acknowledgement
- 3. Approval of the Agenda
- 4. Program Committee Workplan review
- 5. Human Rights and Equity Action Plan
- 6. Multi-Year Strategic Plan Progress Report
- 7. Adjournment



# **Program Committee Report**

March 20, 2025

# **Human Rights and Equity Action Plan**

Submitted By: Sheryl Robinson Petrazzini, Director of Education

Prepared By: Yohana Otite, Human Rights and Equity Advisor

Gerry Smith, Superintendent of Student Achievement, Safe,

Compassionate and Equitable Schools Jolene John, Indigenous Education Lead

Jamie Nunn, Associate Director, School Improvement, Learning

Services

### **Recommendation:**

That the Human Rights and Equity Action Plan report be received.

# **Background:**

The <u>Human Rights and Equity Action Plan 2023-2028</u> builds upon the work that was started, with a renewed commitment aligned with HWDSB's <u>Multi-Year Strategic Plan</u> and <u>Board Improvement Plan</u>, 2024-2025. The HWDSB Human Rights Office and the Equity Department collaborates with many other HWDSB departments and teams in the creation and implementation of the plan focusing on the six key priorities and commitments identified:

- Indigenous Educational Wellness
- Inclusive Classroom Pedagogies and Learning Environments
- Dismantling Anti-Black Racism
- Anti-racist and anti-oppression learning and work environments
- A culture of addressing human rights barriers, discrimination, and harassment
- Employment equity, diversity, and inclusion.

# **Status:**

### **Indigenous Educational Wellness**

Focusing on the importance of aligning and integrating the <u>Indigenous Education Circle Strategic Action Plan 2021-2025</u> and <u>Human Rights and Equity Action Plan 2023-2028</u>, staff is working on implementing the <u>Indigenous Education Policy</u> including understanding the system's responsibilities as treaty partners. For example, this year Special Education, Equity an Inclusion

and Indigenous Education Departments have collaborated to build system capacity including learning about Jordan's Principles and its application in schools when supporting Indigenous students with disabilities and understanding our roles and responsibilities as 'Pillars of the Palisade' and human rights duty bearers.

### <u>Inclusive Classroom Pedagogies and Learning Environments</u>

In keeping with our commitment to the ongoing development of inclusive classroom pedagogies and learning environments, we have implemented a cross-departmental focus on creating the conditions for learning, embedding identity-affirming classroom-based teaching and learning strategies and responding to student needs. This cross-departmental collaboration includes the Indigenous Education, Social Work, Equity, Human Rights, Special Education and Program Departments. Teams continue to collaborate, co-learn, co-facilitate sessions that are designed to impact the teaching practice of educators representing every elementary school in our system.

This year, we have an intentional focus on inclusive education in support of students with disabilities. The Special Education, Inclusion and Equity Department, in collaboration with the Human Rights Office, developed and provided a three-part learning series to principals and vice-principals on the Duty to Accommodate, including building leaders' capacity on understanding Universal Design for Learning, understanding ableism, implementing Individual Education Plans as well as the Identification, Placement and Review Committee (IPRC) process.

# **Dismantling Anti-Black Racism**

The focus of this area has been to build school leaders and staff capacity and knowledge to identify, interrupt and address anti-Black racism in both learning and working environments. Last year, school leaders were engaged in professional learning with Dr. Nicole West-Burns and this year the learning continued engaging educators using the Critically Conscious Practitioner Inquiry (CCPI) process. Critically Conscious Practitioner Inquiry (CCPI) is a process whereby educational practitioners lead their own inquiry within the context of building their critical consciousness and supporting the building of critical consciousness for their students (West-Burns, 2014 as cited in West-Burns & Murray, 2016). Thirty-three schools have participated in the CCPI journey this school year. This learning supports the school improvement planning process and the commitments in the Anti-Black Racism Policy.

### Anti-racist and anti-oppression learning and work environments

Enhancing learning and working environments to be free from hate and discrimination continues to be an important focus of our plan. In December 2023, the Board of Trustees passed a student-led motion to train school-based staff with reference to recognizing and responding to Islamophobia, Anti-Palestinian, and Antisemitism. This year the focus has been in implementing the plan to action the motion by creating awareness and understanding of different kinds of discrimination and hate, focusing on 1) Islamophobia, Anti-Muslim Hate and Anti- Palestinian Racism, and 2) Antisemitism.

# 1) Challenging Islamophobia, Anti-Muslim Hate and Anti-Palestinian Racism

To develop the learning content and to train facilitators on Islamophobia and anti-Palestinian Racism, staff acquired *KR Consulting* through a competitive procurement process. *KR Consulting* developed a video-based learning module, a facilitator guide and supporting resources. Further, they trained facilitators to deliver this training to school-based and system-based staff. All principals and vice-principals engaged in the learning at the October 9<sup>th</sup> PVP learning session. During the November 1<sup>st</sup> PA Day, school-based staff participated in the learning. In addition, surpassing the requirement of the Board motion, throughout December to January, service staff engaged in the learning.

# 2) Recognizing, Preventing and Responding to Antisemitism

To develop the learning content and to train facilitators on antisemitism, staff acquired *Facing History and Ourselves* through a competitive procurement process. *Facing History and Ourselves* developed a video-based learning module, a facilitator guide and supporting resources and trained facilitators to deliver this training to school-based and system-based staff. All principals and vice-principals engaged in the learning at the February Principal and Vice-Principal learning session. On the February 28 PA Day, school-based staff participated in the learning. Throughout February and March, service staff engaged in this learning.

# A culture of addressing human rights barriers, discrimination, and harassment

One of the focus areas this school year has been to develop and implement an approach to tracking hate-based and human rights incidents system-wide to be able to identify trends and publicly report the data. The Human Rights Office (HRO) has developed the Human Rights and Hate-Based Incidents Response Tracking Tool to be able to document incidents that occur in schools and how schools are responding to these incidents. The tool was launched on March 5, 2025, and school leaders will start using the tool beginning March 17, 2025. The tool works in conjunction with the Ministry Safe Schools Report.

The Human Rights Office continues to oversee the <u>Human Rights Complaints Resolution Procedure</u> to resolve human rights issues brought to the HRO. Between September 2024 to January 2025, a total of 20 complaints/concerns were received: 5 were addressed through the early resolution process, 8 were addressed through the formal investigation process, 7 were referred to other areas either because they were not related a human rights issue, or they were out of the HRO's mandate and 0 have escalated to the Human Rights Tribunal of Ontario.

The Human Rights Office works in collaboration with other departments to build capacity of staff in understanding our roles and responsibilities under the Human Rights Policy and the Ontario Human Rights Code. The HRO also implemented a new role of System Navigator to support students and families in navigating the school system and proactively addressing human rights barriers.

# Employment equity, diversity, and inclusion

The We All Count: Staff Voice Survey was created to provide HWDSB with insight from our staff and act as a checkpoint to find the supports and programs they need to enhance staff well-being. The survey combines two key components: staff census demographic information and staff climate. By using this streamlined approach, we are gathering both demographic and workplace climate data to gain a deeper understanding of our staff's experiences. We commit to sharing the feedback and insights we receive back with staff as we want to make informed decisions that support a positive, inclusive, and joyful work environment.

# **Financial Implications:**

The initiatives outlined in this report have been implemented by multiple HWDSB departments. These initiatives have been undertaken within the existing departmental budgets contained in the 2024/2025 budget approved by the Board of Trustees in June 2024.

# **Strategic Directions:**

# **Upholding Human Rights, Safety & Well-Being**

We will support all students and staff to feel safe and secure in our classrooms and school communities.

# **Providing Equitable Quality Education**

We will offer equitable quality educational opportunities to improve student engagement, learning and achievement for future-readiness.

# **Collaborating with Students, Families & Communities**

We will build reciprocal relationships and partnerships to enhance access and engagement for students, families, and communities.

# **Building a Sustainable Education System**

We will adapt to a rapidly changing world through responsible fiscal management, investing equitably in accessible and sustainable facilities, and supporting a robust workforce.

### Reinforcing Indigenous Educational Wellness & Reconciliation

We will honour our commitment to Truth and Reconciliation by nurturing respectful and reciprocal relationships among Indigenous Peoples and Treaty Partners, and by cultivating intergenerational healing and wellness in a restorative education system.



# PROGRAM COMMITTEE REPORT HWDSB Multi-Year Strategic Plan (MYSP) Progress Report (Literacy, Numeracy and Future Preparedness)

March 20, 2025

Submitted By: Sheryl Robinson Petrazzini, Director of Education

Prepared By: Jamie Nunn, Associate Director, School Improvement, Learning Services

Jolene John, Indigenous Education Lead

Estella Jones, Superintendent of Quality Instruction in Mathematics and Equity, K-12

Michelle Lemaire, Superintendent, Program, Equity, and Innovation

Sally Landon, Manager, Research and Analytics

### **Recommendation:**

That the Multi-Year Strategic Plan (MYSP) Progress Report (Literacy, Numeracy and Future Preparedness) for the 2024-2025 school year be received.

# **Background:**

The Hamilton-Wentworth District School Board (HWDSB) Board of Trustees approved a new Multi-Year Strategic Plan (MYSP) 2023-2028 which was officially launched on January 17, 2024. The Strategic Directions of the MYSP continues to inform our Board Improvement Plan, 2024-2025 (BIP). Staff are deeply committed to this work as they work collaboratively with and among interdisciplinary teams to meet the five pillars of the Multi-Year Strategic Plan. This report will focus on the progress that we have made in relation to the following three goals of the Board Improvement Plan, 2024-2025:

- Improved literacy achievement for every student
- Improved math achievement for every student
- Improved preparedness for the future for every student

In May 2025, staff will report on the progress of the two goals of the <u>Board Improvement Plan</u>, 2024-2025

- Improved well-being for every student
- Improved engagement for every student

### **Status:**

Staff continue to implement the objectives of the MYSP and BIP and as a result, there are multiple examples of improvement throughout HWDSB. The following progress report outlines our work

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on three of the goals in our BIP along with available monitoring measures at this point in our implementation (Appendix A). It is our second year reporting on our Board Improvement Plan goals. In October of last year, we reported on our work following the first year of implementation of the BIP. Within that report, we celebrated and recognized improvements in all five areas of the BIP. However, we also noted areas for future monitoring and improvement.

The following recommendations for improvement were made in the October 2024 report. Staff need to:

# **Improved Literacy Achievement for Every Student**

- Assign a Reading Specialist to every elementary school to support classroom teachers with the implementation of the universal screener in Kindergarten to Grade 2.
- Ensure additional professional development to support achievement on Grade 6 EQAO Writing.
- Ensure every secondary school receives resources to implement Tier 3 reading supports to close the reading gaps for students who require more intensive support.

# **Improved Numeracy Achievement for Every Student**

- Implement an updated Math Achievement Action Plan, 2024-2025 to ensure:
  - o Greater monitoring of Grade 3 and 6 student progress in Math Priority Schools.
  - Participation of all Grade 3 and 6 teachers in non-math priority schools in a professional learning series to enhance their understanding of key concepts and develop their use of high impact instructional practices.
  - Additional professional learning to include Grade 10 teachers to complement the support that Math Facilitators provide Grade 9 teachers and students.

# **Improved Future Preparedness for Every Student**

- Continue to prioritize credit accumulation strategies, ranging from proactive initiatives like Robotics learning and awarding secondary school credits through the Prior Learning Assessment and Recognition (PLAR) process, to responsive approaches like credit rescue.
- Continue to promote and encourage students to enroll in Grade 12 Math and Grade 11/12 Science courses.

Staff are on track and have implemented each of the identified next steps above from the October 2024 report and will comment on these areas and other identified next steps relative to how our students are currently achieving at this point in the 2024-2025 school year. Staff continue to educate principals, vice-principals, system staff and school-based educators on the impact of the Board Improvement Plan on department and school improvement planning.

## **Disproportionality Data**

The HWDSB Research and Analytics Department is actively working to provide accurate disproportionality data. Currently, the HWDSB is in the middle of a multi-year data collection cycle that upon completion, will provide a robust dataset to better inform our work with all

students. Analyses will go deeper as we are able to explore intersectionalities that will illuminate for us the nuances behind the initial <u>2021-22 Disproportionality Data Report</u> findings. We look forward to an updated and larger dataset. More importantly, we are committed to creating conditions that better support every learner to experience success in our schools and school communities. Our work to address disproportionality is an ongoing priority as we will continue to report on disproportionalities and how we actively address them. Where possible we are highlighting the known disproportionalities that exist in our current system student achievement data (Appendix A).

# **Monitoring Report: Actions, Outcomes, and Next Steps**

# **Goal: Improve Literacy Achievement for Every Student**

Staff continue to work across all schools to implement the three strategies identified in the <u>Board Improvement Plan 2024-2025</u> to improve literacy achievement for every student.

### What have we done?

Staff collaborated across multiple departments and disciplines (Equity, Specialized Services, English Language Learners, Indigenous Education, and Psychological Services) and implemented a new HWDSB K-12 Reading Strategy in the fall 2024. The Reading Strategy focuses on three areas: high-quality, evidence-based instruction to support every learner, effective assessment practices to inform reading intervention, and effective reading interventions in response to identified gaps in reading. To support this goal, we have:

- Implemented *Acadience*. A universal reading screener for every Kindergarten to Grade 2 student in HWDSB.
- Supported elementary educator capacity and efficacy by providing job-embedded coaching and development through the support of 43 Reading Specialists who partnered with teachers to identify learning needs and develop programming in Kindergarten to Grade 2 classrooms.
- Offered multiple professional development workshops throughout the school year. To date, close to 3500 educators have participated in the "Fundamentals of Reading" workshops.
- Implemented a Tier 2 Reading Intervention program titled, *Wilson Just Words*, in 15 elementary schools and in 4 comprehensive special education classes for students in grades 6 to 8.
- Continued to champion an after-school reading support program titled *Phonics Academy* in 45 elementary schools. This fall, 107 programs were offered in which 535 students engaged in 3 hours per week of additional reading support.
- Implemented *Wilson Reading Program* as a Tier 3 intervention reading program in every secondary school. Additional resources were allocated to over half of the secondary schools for staff to provide intensive reading support program through a learning structure called Interdisciplinary Language Studies (ILS).

- Delivered specific learning sessions to literacy school teams (literacy lead, learning resource teacher, ESL teacher and school principal) to implement strategies to improve achievement on Gr. 3 and 6 EQAO writing, prepare the optimal learning experience for students for EQAO and OSSLT, and create supportive plans for every student including students with special education learning needs or who are learning English as a new language.
- Developed a professional learning community (PLC) for educators who are actively participating in year two of a four-year NBE3 Pilot Project, a careful and intentional rollout of the grade 11 English course, *Understanding Contemporary First Nations, Métis, and Inuit Voices.* Through three teacher release days, PLC participants are enabled to receive professional learning and capacity building in Indigenous Education, Knowledges, histories, current contemporary complexities, and Indigenous pedagogical (teaching and learning) approaches. This school year, eight schools engaged in this process: Ancaster High School; Bernie Custis Secondary School; Nora Francis Henderson; Sir Allan MacNab; Sir Winston Churchill; Glendale; Westdale; and; Westmount.

### What have we learned?

Staff have critically reflected upon the supports and interventions we provide educators and students, and upon how we work together, across departments. Staff have learned a considerable amount in the past year including:

- Staff recently completed the middle of year *Acadience* screening of students who were below benchmark from the beginning of year screening that took place in the fall. *Acadience* allowed teachers to respond to identified reading gaps from the first assessment and to start implementing intervention strategies that are specific to the student's needs. Following these two assessments, students in Grade 1 have the greatest area of need (Appendix B)
- Students thrive when they see themselves in their learning. It is important to provide a variety of texts and media that are culturally responsive to students and their identity.
- Educators are demonstrating a willingness to improve literacy engagement for every student through Reinforcing Indigenous Educational Wellness and Reconciliation in the Grade 11 English *Understanding Contemporary First Nations, Métis, and Inuit Voices* course (NBE). This is exemplified by the enthusiastic response amongst secondary principals and educators who are engaged in year two of the four-year pilot. Many lessons have been learned, including Teachers learning about Indigenizing approaches to assessment; teachers are learning about how to enable learners to have agency, voice and choice when it comes to text selections; teachers share struggles to make connections to Strand A, an area the Indigenous Education Department continues to support, inform and co-develop.
- Lexia continues to be a strong Tier 2 reading intervention program for students (Appendix B).

- Empower™ Reading continues to be an effective Tier 3 reading intervention program in elementary classrooms. Newly analyzed data from 2023-2024 show significant improvement in literacy assessments for students in the program. This year, we anticipate all schools will finish the program in its entirety by the end of this school year as 94% of schools are at or close to target.
- Students now write the Ontario Secondary School Literacy Test (OSSLT) each semester
  when they are enrolled in the Grade 10 English class which began in Fall 2024. We have
  noted that offering students the opportunity to attempt the OSSLT once per semester
  offers a greater ability to respond to student needs (e.g. literacy support sessions).
- The ILS structure in the 7 secondary schools offer promising results (Appendix B). Feedback from students has been overwhelmingly positive. Students demonstrate strong understanding of their reading gaps and identified strategies that they use to close these gaps. Teachers report greater preparedness to support reading in secondary schools.

# What are our next steps?

- We will continue to train K-2 teachers on the new universal reading screener, *Acadience Reading*.
- We will continue to develop and implement strategies that will move more students towards at or above benchmark by responding with:
  - Diagnostics to determine specific skills to work on with specific students,
  - Strategies for school teams to work at the school level to see who, how and when to support students, and,
  - Proactive and responsive strategies to enhance the capacity of reading specialists who can in turn support school teams to move students with their reading.
- We will refine the reading intervention identification tool for students as they leave Grade 8 and enter secondary schools so that school teams can respond proactively using the ILS learning structure.
- We will continue to implement NBE English *Understanding Contemporary First Nations, Métis, and Inuit Voices* in 3 Spring sessions whereby current PLC Teachers will share what they have learned with upcoming NBE Teachers. NBE PLC Teachers will be engaged in Summer Writing to complete the course shell. We will continue to strengthen partnerships with places such as Crawford Lake. We continue to future-proof as we consider HWDSB's stance on maintaining the commitment to one dedicated High School English Course and consider public communication, summer school and e-Learning opportunities.

### Goal: Improve Numeracy Achievement for Every Student

Staff continue to work across all schools to implement the three strategies identified within the Board Improvement Plan to improve numeracy achievement for every student. This goal and the specific strategies align with the Ministry's focus on improving mathematics achievement provincially and HWDSB's Math Achievement Action Plan (Appendix C).

### What have we done?

Building on the belief that there is joy in numbers, the following outlines the work we have done across all HWDSB schools and specifically to support the Math Priority Schools:

### All Schools

- Developed and implemented a Math Achievement Action Plan, 2024-2025 (Appendix C),
- Since September, we have offered a variety of professional development sessions for approximately 1600 teachers. For example:
  - All Grade 3 teachers from non-math priority schools participated in learning about high impact instructional practices (HIIP) in the content areas of addition, subtraction, multiplying and dividing.
  - All Grade 6 teachers from non-math priority schools participated in learning about
     HIIP in the content areas of multiplying, dividing, fractions and decimals.
  - All Grade 9 teachers participated in learning about (HIIP) in the content areas of fractions and algebra.
  - All secondary mathematics department heads participated in learning about HIIP with particular emphasis on the use of tools and representations, math conversations, and direct instruction.
  - Over 80 new teachers participated in learning to deepen their understanding of the math curriculum and strategies to engage students.
  - Over 150 occasional teachers participated in learning to create meaningful math opportunities for students through the use of various tools including Knowledgehook.
  - Additional professional learning for elementary school teams and leaders to deepen their understanding of the math curriculum, small group instruction, assessment, and use of tools and representations.
- Continue to promote formal teacher training programs like Mathematics Part 1 and Part 2. Since September 2024, 61 elementary teachers have completed Additional Qualification (AQ) in Mathematics (Part 1 or 2).
- Led two EQAO support and learning sessions for all schools to better understand the
  assessment (regarding technical requirements and format), review data, share best
  practices and develop school plans with school teams, including administrators as well as
  classroom, learning resource, English as a Second Language teachers and math
  department heads (secondary).
- Offered two valuable after-school small group learning sessions in over 90 elementary schools which supported over 400 students including Math Academy (for students in Grades 2-6) and High School Math Prep (Grades 7-8).

### Math Priority Schools

As part of the Ministry Math Action Plan, 43 HWDSB elementary and 3 HWDSB secondary schools were identified as 'math priority schools' and additional resources were provided to support these 46 schools. The focus within these schools continues to be building teacher capacity and knowledge, small group instruction of students, and creating an inclusive learning environment that centres on the gifts and needs of each student. These schools are specifically supported by a dedicated team of 24 math facilitators who work specifically with Grades 3, 6 and 9 teachers and students. The following outlines the work we have done within the Math Priority Schools:

- Ongoing sharing and professional learning with Math Facilitators focusing on the use of HIIP, developing facilitation skills, and engaging students.
- Ongoing collaboration with the Indigenous Education team to build Math Facilitator understanding and make connections between teaching math and Indigenous education which culminated in an immersive experience for educators at Crawford Lake.
- Sixty (60) small group/individual professional learning sessions for Grades 3, 6, and 9 teachers led by Math Facilitators in schools involving over 300 teachers.
- Gap closing through small group instruction and student progress tracking with students who acquire special education supports.
- School-wide initiatives to build math community such as Crack the Code, Battleship, and Tetris.
- Planning and support for preparing and student participation in semester 1 Grade 9 EQAO.

### What have we learned?

The ongoing professional learning focus on the HIIP continues to shift thinking and practices across HWDSB classrooms. We have learned specifically from teachers, principals and vice-principals that:

- School principals and vice-principals are engaging in ongoing professional learning in mathematics as part of their School Improvement Plan,
- Disproportionalities exist when we compare average report card marks in mathematics for students with an Individual Education Plan relative to English Language Learners and all students (Appendix A),
- Math digital tools such as KnowledgeHook and MathUp are making a difference in our classrooms and helping identify student learning needs and improve educator conceptual knowledge and understanding of evidence based pedagogical practices,
- After-school small group learning opportunities are closing gaps in student understanding (Appendix D),
- Teachers' are reporting an increased understanding of the mathematics curriculum, increased confidence in delivering mathematics program, and increased understanding of HIIP (Appendix D),
- Math Facilitators are reporting increased engagement and confidence in all students,

- Gap closing efforts has improved student understanding of key mathematical concepts specifically in the areas of adding and subtracting in Grade 3, and multiplying and dividing in Grade 6 (Appendix D), and
- Schools are creating effective plans to support student preparation and participation in the EQAO assessment to develop student confidence and achievement.

# What are our next steps?

### All Schools

We continue to build teacher capacity with professional learning opportunities to deepen understanding and support the implementation of effective practices. Developing leadership within each school continues to be a focus. We value and recognize that it is the leadership of principals, Math Lead Teachers, and Math Department Heads and Assistant Heads, that will continue to support teachers as they deepen their understanding and refine their practice to meet the needs of every student. Professional learning sessions with learning resource teachers and English as a Second Language teachers from all schools will focus on deepening understanding of how to support students specifically in mathematics. In addition, learning will continue to build capacity with math department heads and Grade 10 teachers regarding the use of high impact instructional practices to develop student understanding of key concepts and problem-solving skills. Continued learning and review of assessment practices are also required to build greater consistency in reporting and alignment with curriculum expectations. Knowing the importance of collaborating with families, schools will be celebrating the joy in numbers by building math communities through numeracy events for families to join and participate in this spring.

### Math Priority Schools

Building teacher capacity and small group instruction continue to be the focus of the work in Math Priority Schools. For the remainder of the year, Math Facilitators will be deepening their understanding of key concepts such as proportional thinking, spatial sense, measurement and geometry, as well as problem solving. Student progress will be monitored as Math Facilitators work with students to close gaps and build student understanding.

# **Goal: Increase Preparedness for the Future for Every Student**

Preparing our students for their future is a critical part of our Board Improvement Plan. Staff have identified four specific strategies to achieve this goal.

### What have we done?

Professional Development

• Provided targeted professional development for all Technological Education Teachers in the fall of 2024 to support the implementation of the new technology curriculum.

- Championed a focused robotics plan for every HWDSB school to bring this experiential learning opportunity to every student through the classroom, club or a competition experience (Appendix E and Appendix F).
- Led the successful implementation of myBlueprint, an online platform designed to provide students and their families with dynamic resources so that students can engage in the Individual Pathway Planning (IPP) process in partnership with and support from school staff.
- Enhanced teacher capacity by providing release time to learn about robotics and how it relates to learning in the classroom (e.g. connections to coding).

### Resource Allocation

- Implemented a new pilot project at Mohawk College to support students 18 to 21 years old to who are learning English as an additional language while developing a postsecondary plan,
- Added additional sections in all secondary schools to support students to improve their credit accumulation either through alternative education learning or Prior Learning Assessment & Recognition (PLAR).

# Community Partnerships

- Strengthened partnerships with key interested parties who have the common goal of helping students see their future selves as engaged, successful and contributing members of society. Partners include FIRST Robotics Canada, Mohawk College and ArcelorMittal Dofasco.
- Implemented a system-wide pathways event for Grade 10 HWDSB students and their families to explore opportunities for their future, either immediately within their secondary career (e.g. SHSM, Dual Credit, OYAP, etc.) or post-secondary pathway plans after their learning career at HWDSB.
- Continued our strong pre-existing partnership with Industry Education Council (IEC) of Hamilton to develop and implement a success strategy to provide career coaching opportunities for every Grade 10 student in HWDSB.

# What have we learned?

Students want more opportunities to engage in experiential, on-the-job learning opportunities.

- HWDSB continues to expand its SHSM footprint with the recent submission of 5 new applications for SHSM offerings in the 2025-2026 school year.
- The Ontario Youth Apprenticeship Program (OYAP) continues to harness the interest of HWDSB students to develop job-embedded skills and experience by engaging employers in the city to provide meaningful placement opportunities. Early registration numbers are promising, with 544 OYAP Participants and 24 Registered Apprentices as of February 2025. These numbers will grow as we progress through this semester when students start to plan their next steps for fall 2025.

- With targeted support at each secondary school, an additional 118 students who were eligible to earn credits through Prior Learning Assessment & Recognition (PLAR), were able to do so, improving their credit accumulation progress and getting them closer towards earning their Ontario Secondary School Diploma (OSSD).
- There is consistent increase in the percentage of students requesting to take Grade 12 Math, Grade 11 and Grade 12 Science courses next school year compared to this year:

% Gr. 12 Math Course		% Gr. 11 Science Course		% Gr. 12 Science Course	
Requests		Requests		Requests	
2024-2025	2025-2026	2024-2025	2025-2026	2024-2025	2025-2026
2.8	3.3	3.35	3.5	2.4	3.0

# What are our next steps?

- Targeted and precise allocation of resources to support implementation of myBlueprint in every secondary school to support students with their career and post-secondary planning.
- Support the elementary to secondary progression process through the implementation of consistent use of *myBlueprint* by every Grade 8 student.
- Build a cohesive approach in every school on student success, timetabling and monitoring strategies (e.g. PLAR process, school support team processes, career coaching, intentional timetabling, supports to experiential learning opportunities like SHSM, OYAP and Dual Credits) that will enhance students.
- Develop the skill sets of our Elementary Student Success Teachers to support Grade 8 students as they move from an elementary learning environment to a secondary setting.
- Support schools with line allocations to promote increased uptake of course requests for Grade 12 Math courses, Grade 11 and Grade 12 Science courses.
- Continue to make explicit connections for interdisciplinary learning such as using robotics as the vehicle to teach coding, literacy, communication and problem-solving.

# **Financial Implications:**

Staff continue to fully utilize all available funding in the Core Education expenditures and Responsive Education Priorities (REP) funding as approved by the Board of Trustees in June 2024 to support the implementation of the strategies connected to each of these three goals in the Board Improvement Plan.

# **Strategic Directions:**

## **Upholding Human Rights, Safety & Well-Being**

We will support all students and staff to feel safe and secure in our classrooms and school communities.

# **Providing Equitable Quality Education**

We will offer equitable quality educational opportunities to improve student engagement, learning and achievement for future-readiness.

# **Collaborating with Students, Families & Communities**

We will build reciprocal relationships and partnerships to enhance access and engagement for students, families, and communities.

# **Building a Sustainable Education System**

We will adapt to a rapidly changing world through responsible fiscal management, investing equitably in accessible and sustainable facilities, and supporting a robust workforce.

# **Reinforcing Indigenous Educational Wellness & Reconciliation**

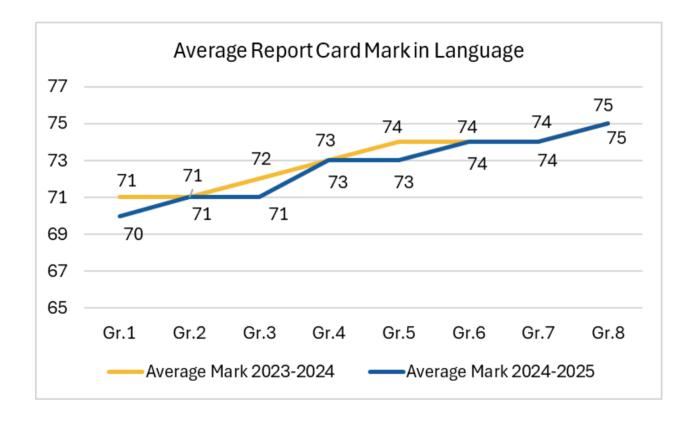
We will honour our commitment to Truth and Reconciliation by nurturing respectful and reciprocal relationships among Indigenous Peoples and Treaty Partners, and by cultivating intergenerational healing and wellness in a restorative education system.

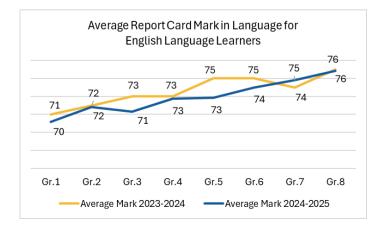


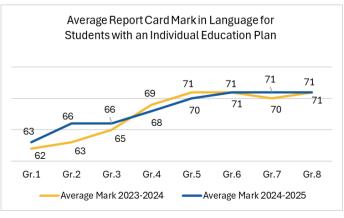
Goal:

We Will Improve Literacy Achievement for Every Student

# Progress Monitoring Elementary: Language Achievement at Report Card 1





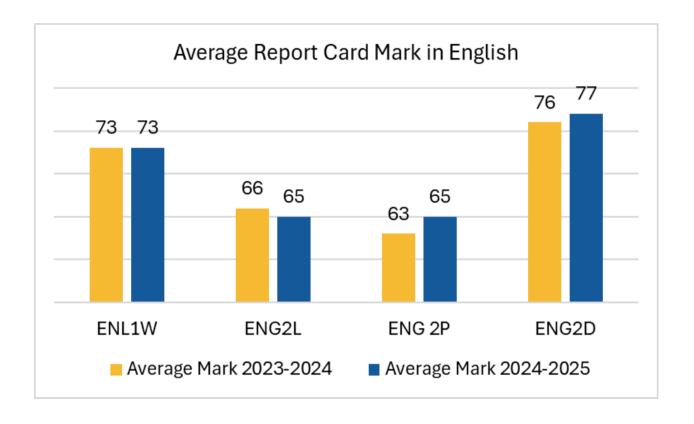


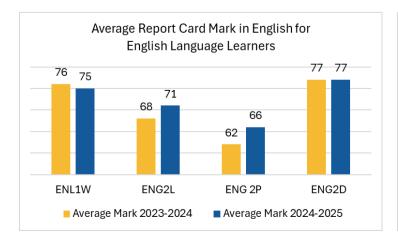


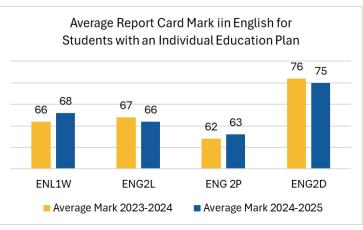
Goal:

# We Will Improve Literacy Achievement for Every Student

# Progress Monitoring Secondary: English Achievement at Semester 1





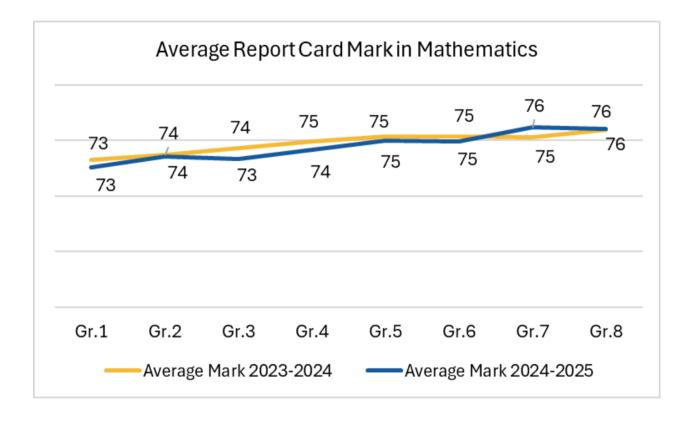


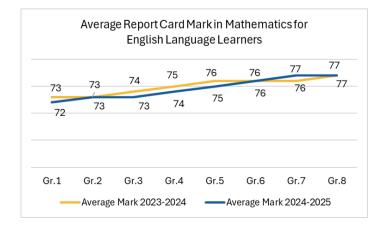


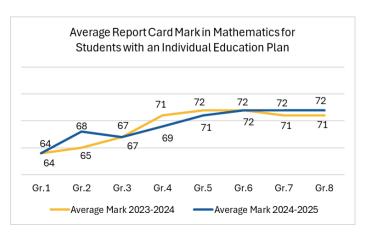
# Goal:

# We Will Improve Numeracy Achievement for Every Student

# Progress Monitoring Elementary: Mathematics Achievement at Report Card 1





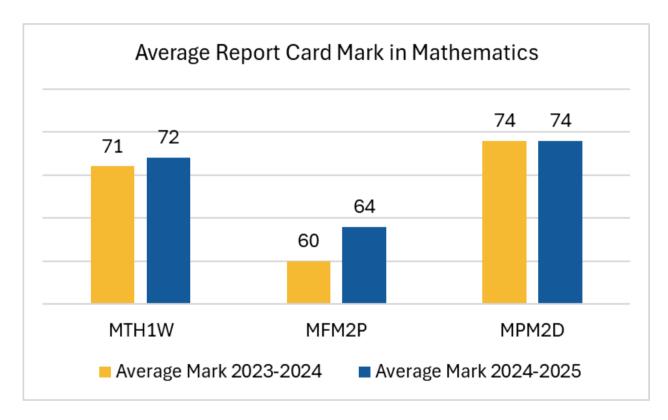


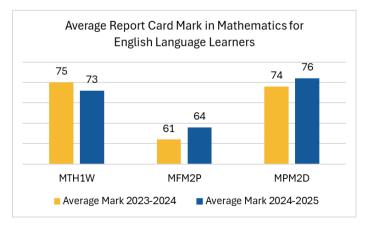


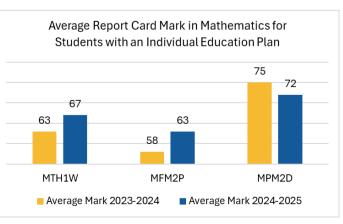
Goal:

# We Will Improve Numeracy Achievement for Every Student

# Progress Monitoring Secondary: Mathematics Achievement at Semester 1





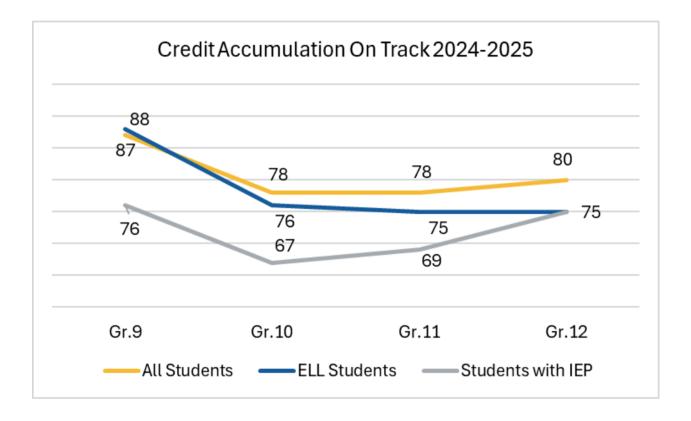


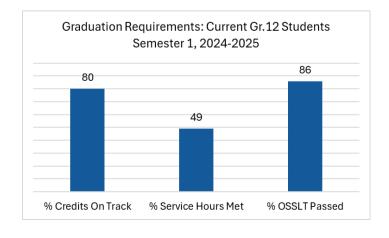


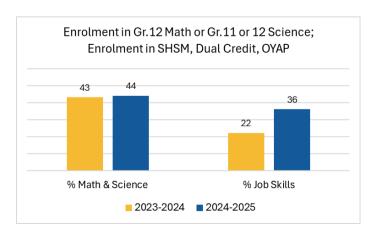
Goal:

We Will Improve Preparedness for the Future of Every Student

# Progress Monitoring Secondary: Future Preparedness at Semester 1









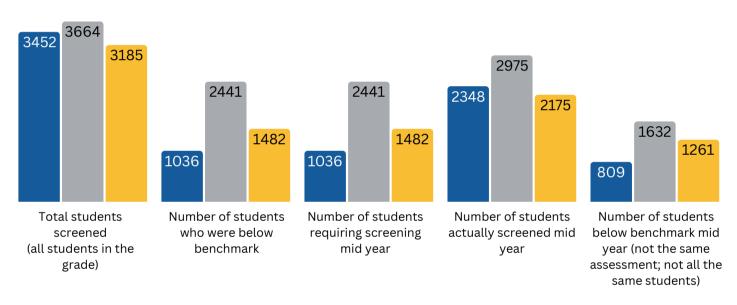
Goal:

### IMPROVE LITERACY ACHIEVEMENT FOR EVERY STUDENT

# **Acadience Reading Screener**

This is our first year using Acadience Reading. Our baseline progress in screening is captured below. During Year 2, we can begin showing reading progress as students advance to another grade and we follow their trajectories.

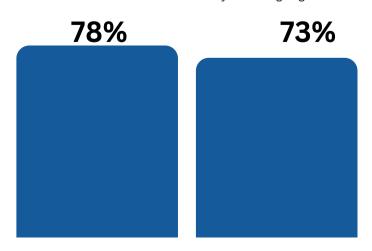
Kindergarten Grade 1 Grade 2



# Lexia Program Data

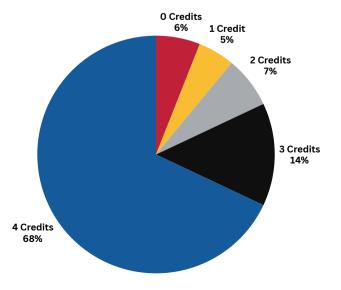
Percentage of teachers who reported that the use of Lexia has helped them better understand the strengths and needs of their students

Percentage of teachers who reported that use of Lexia has helped them know how to support their students who are not yet reading at grade level



# Wilson Reading Program

Students in Interdisciplinary Literacy Studies (ILS) (using Wilson Reading) on track by achieving 4 credits during Semester 1



### APPENDIX C: MATH ACHIEVEMENT ACTION PLAN

# Hamilton-Wentworth District School Board

# MATH ACHIEVEMENT ACTION PLAN 2024-2025









**BE YOU. BE EXCELLENT.** 

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Hamilton-Wentworth District School Board Math Achievement Action Plan

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### Hamilton-Wentworth District School Board Math Achievement Action Plan 2024-2025

As outlined in its Mission, the Hamilton-Wentworth District School Board (HWDSB) is committed to creating the conditions for students to experience a sense of belonging and be engaged in dynamic learning to reach their potential and build their own future. The HWDSB Math Achievement Action Plan (MAAP) focuses on understanding and meeting individual needs to improve student achievement by placing students at the centre of the plan.

The HWDSB Math Achievement Action Plan is informed by the Ministry's Math Achievement Action Plan (2023) and is designed to support student achievement and results in mathematics across the province in Grades 3, 6, and 9. The HWDSB Math Achievement Action Plan includes the use of proven evidence-informed strategies and approaches to address the needs identified in schools. The MAAP focuses on three priority action areas.

# **Math Priority Action Areas**

<u>Curriculum Fidelity:</u> Ensuring fidelity of curriculum implementation including the intentional use of proven strategies that support academic math achievement

<u>Math Content Knowledge for Teaching:</u> Engaging in ongoing learning to strengthen mathematics content knowledge for teaching

<u>Knowing Your Students:</u> Knowing the mathematics learning, and ensuring mathematical tasks, interventions and supports are relevant and responsive

Specific Actions to Support Growth in Curriculum Fidelity	Specific Actions to Support Growth in Math Content Knowledge for Teaching	Specific Actions to Support Growth in Knowing Your Student
Draw explicit connections to and between mathematical processes and in lesson planning and use proven instructional and assessment practices (e.g. High Impact Instructional Practices)	Utilize student achievement data and student work to establish focus areas of mathematics professional learning	Provide a digital math tool to support student mathematics learning at home and/or at school, that can be used by teachers to understand current student learning levels and provide targeted supports for students
Connect instruction and assessment to curriculum expectations and long term essential mathematical understandings using developmental continuums	Engage in collaborative meetings to deepen knowledge of mathematics, curriculum, instructional starting points and interventions	Monitor and respond to students' perception of and confidence in math
Leverage digital math resources to support curriculum-linked practice	Model a positive and curious learning stance with mathematics to create an environment where students are excited to learn mathematics and develop into confident math learners	Plan, teach, and assess learning in culturally responsive and relevant ways that motivate students to take ownership of their learning of, and progress in, mathematics

To support the Math Priority Action Areas, Math Facilitators will be leading math instruction and directly supporting students in 43 math priority schools. Professional learning will focus on building understanding and skills that align with the action areas and the use of digital math

tools, through various opportunities such as system learning, after-school sessions, and Additional Qualifications in math. The foundation of this learning will be based on human rights and equity, including, understanding biases, prejudices and the impact of systemic racism on outcomes in mathematics. In addition, we will further our learning alongside the Indigenous Education team to improve Indigenous educational wellness and advance efforts towards Truth and Reconciliation.

# **Key Performance Indicators & Monitoring**

As outlined by the Ministry of Education, the following key performance indicators (KPIs) will be used to assess the impact in schools:

- Number of students who progressed in their level of achievement in math on their report cards for the Gr 3, 6, and 9 cohort
- Percentage of students who progressed in their level of achievement in EQAO Math
- Number of students whose individual attendance rate in math class is equal to or greater than 90 %
- Number of Grades 3, 6, and 9 math students who report positive results regarding math attitudes and confidence
- **NEW in 2024-25\*** Monitoring the levels of achievement of students supported through curriculum modifications on math report cards (I, R, L1, L2, L3, L4)

Monitoring of progress in implementation and impact will include:

- Educator reporting of learning and use of High Impact Instructional Practices
- Number of educators engaging in professional learning about curriculum implementation
- The number of students with the IEP box checked in math at each level of achievement
- The number of students accessing the digital math resource, Knowledgehook in Grades 3, 6, and 9
- The number of teachers using MathUP as part of their math programming
- Student achievement by level across curriculum expectations or key concepts in Grades 3, 6, and 9
- The number of educators participating in collaborative meetings and professional learning
- Educators reporting use of a variety of regular assessment practices such as conferencing, exit cards, written practice, portfolios, observations, EQAO questions, and surveys, to inform programming
- Students reporting positive results regarding math attitudes and confidence as indicated by their response to the statement 'I am good at math' in Grades 3, 6, and 9
- Educators self-reporting on planning, teaching and assessing in culturally responsive, relevant ways
- Data collected regarding student understanding of key concepts through small group instruction

# **Improving Numeracy Achievement for Every Students**

Improving numeracy achievement for every student is one of the goals within the HWDSB Multi-Year Strategic Plan. To provide equitable, quality education opportunities:

- We will provide professional learning and coaching to build educator capacity in Mathematics content knowledge and pedagogy using effective numeracy strategies including:
  - High Impact Instructional Practices (HIIP),
  - o Culturally Relevant, Responsive Pedagogy (CRRP),
  - o Differentiated Instruction (DI),
  - Universal Design for Learning (UDL),
  - o Indigenous Pedagogies.
- We will support student competence and confidence in Mathematics by:
  - Collaborating with students and families,
  - Providing rich problem-solving and experiential tasks for students,
  - o Making student thinking explicit through Math conversations in the classroom,
  - Small group instruction,
  - Providing Mathematical thinking tools such as manipulatives and,
- We will collaborate regularly to implement effective, evidence-based assessment practices to identify strengths and areas for growth in students.

# **Expected Outcomes**

Outcomes	Math Priority Schools	All Schools
Increase the percent of students achieving	Gr 3 6% increase	Gr 3 4% increase
provincial standard or above on report cards for	Gr 6 4% increase	Gr 6 3% increase
current cohort of Grades 3, 6, and 9 students	Gr 9 3% increase	Gr 9 2% increase
Increase the percent of students achieving		
provincial standard or above on the 2024-25	Gr 3 close gap by 4%	Gr 3 close gap by 2%
mathematics portion of EQAO assessment by	Gr 6 close gap by 3%	Gr 6 close gap by 2%
reducing the gap between board and provincial	Gr 9 close gap by 5%	Gr 9 close gap by 2%
results		
Increase the percent of students in Grades 3, 6	Gr 3 7% increase	Gr 3 5% increase
and 9 who report positive results regarding	Gr 6 5% increase	Gr 6 3% increase
math attitudes and confidence	Gr 9 4% increase	Gr 9 2% increase

# Reporting

School boards are required to complete and submit to the Ministry their Math Achievement Action Plan three times a year. In alignment with this expectation, three updates will be provided to the Board of Trustees.

**November 15, 2024:** Initial strategies and key performance indicators

March 28, 2025: Progress report including data from Semester 1

**July 18, 2025:** Final report including data from Semester 2

# Supports and Professional Development Plan for The Math Achievement Action Plan

### The Math Team

### School Math Lead

Elementary schools are encouraged to have a School Math Lead. The School Math Lead should be someone who is willing to participate in system learning and to share the learning with other educators in collaboration with the Principal. The School Math Lead would have participated in the MathUP learning session in the 2023-24 school year and supported the initial use of MathUP within schools. The role of the School Math Lead is voluntary and is determined by the Principal each year. While the School Math Lead can have any role within the school, it is important to note that the focus of the Board Math Action Plan is on Grades 3 and 6. In Secondary schools, the Department Head of Math would have the role of Instructional Leader and Math Lead.

### **Math Facilitators**

Math Facilitators play a crucial role within math high priority schools in identified Grades 3, 6, and 9 classes. They are responsible for helping teachers and students improve their understanding and achievement in mathematics. For the 2024-25 school year, there are 21 elementary and 3 full-time equivalent secondary math facilitators who support a total of 43 schools. Their responsibilities include:

- Providing professional development and training to teachers on effective math instruction
- Collaborating with teachers to plan and implement math lessons
- Observing and providing feedback to teachers on their math instruction
- Assisting teachers in analyzing student data to guide instruction and improve student learning
- Modeling effective math instruction for teachers
- Providing resources and materials to support math instruction
- Working directly with students, either individually or in small groups, to provide additional math instruction and support
- Keeping up to date with current research and best practices in math
- Participating in school and district meetings related to math instruction

### **Math Consultants**

The Math Consultants plan and facilitate professional learning across the system for various educators and staff including classroom teachers, Math Facilitators, and Principals and Vice-

Principals. While the consultants work as a team, each consultant will take the lead on the areas listed in their respective portfolio.

Math Consultant, K-12	Math Consultant, K-12	Math Consultant, K-12	
Focus Grade 3	Focus Grade 6	Focus Grade 9	
K-Grade 3	Grades 4-7	Grades 8-10	
FOS 1, 3, 4	FOS 2, 5	Math Priority Schools	
LRT Math Intervention UDL	LRT Math Intervention UDL	Partnerships	
Family Engagement	Digital math tools	Grade 8 to 9 progression	
NTIP	Data	Continuing Education, AQ	
After-school/summer learning	STEM, coding		

# **Superintendent and Principal**

Estella Jones, Superintendent of Quality Math Instruction and Equity, K-12 and Sarah Goodman, System Principal, are leading and supporting the implementation of the HWDSB Math Achievement Action Plan, 2024-2025.

# **Math Priority Schools**

Math Priority Schools were identified by the Ministry based on an analysis of 2021-22 EQAO mathematics achievement data. At HWDSB, this includes 40 elementary and 3 secondary schools with direct support for teachers and students in Grades 3 and/or 6, or Grade 9.

ELEMENTARY	Family of	Grade	Grade
SCHOOLS	Schools	3	6
AM Cunningham (FI)	4	Х	
Bennetto (FI)	4	Х	
Buchanan Park	5	Х	
Cathy Wever	5	Х	Х
CB Stirling	2	Х	Х
Central	4	Х	
Chedoke	5		Х
Collegiate	1	Х	
Cootes Paradise (FI)	4	Х	
Dr. Davey	1	Х	Х
Eastdale (FI)	1		Х
Franklin Road	3		Х
Gatestone	1	Х	
GL Armstrong	3	Х	Х
Gordon Price	2	Х	Х
Guy Brown (FI)	4	Х	
Helen Detweiler	2	Х	Х
Hess Street	4	Х	Х
Highview	3	Х	Х
Hillcrest	2	Х	Х
Holbrook	3		Х
Huntington	3	Х	Х
James Macdonald	2	Х	
Janet Lee	1		Х
Lake Avenue	3	Х	Х
Lawfield (FI)	3	Х	Х
Lisgar	3	Х	Х
Memorial	5	Х	
Parkdale (FI)	2	Х	
Prince of Wales	5	Х	х
Queen Mary	2	Х	Х
Queen Victoria	1	Х	
Queensdale	3	Х	Х
RA Riddell	2	Х	

ELEMENTARY SCHOOLS	Family of Schools	Grade 3	Grade 6
Ridgemount	2	х	х
Sir Wilfrid Laurier	3	Х	Х
Viola Desmond	3	Х	Х
Viscount Montgomery	2		Х
Westwood	2	Х	
WH Ballard		Х	Х
SECONDARY SCHOOLS	FOS	Grad	de 9
Glendale	3	Х	
Sir Winston Churchill	2	Х	
Bernie Custis	4	>	<b>(</b>

# **Overview of Professional Learning Plans**

# **Long-Range Plans**

The following long-range plans are intended to support educators within HWDSB to plan and participate in professional learning throughout the year. Schools are encouraged to refer to this plan when designing learning opportunities at the school level. Learning will continue to focus on the high impact instructional practices (HIIP) with direct curriculum connections. Assessment For Learning will be a common thread throughout the year, as will Culturally Relevant and Responsive Pedagogy (CRRP), Differentiated Instruction (DI), Indigenous Education, and Universal Design for Learning (UDL) within the context of teaching and learning mathematics.

Division	Focus	September- October-November	December-January- February	March-April-May- June
	High-Impact Instructional	Math Conversations Tools and	Direct Instruction Deliberate Practice	Problem Solving Tasks & Experiences
Primary	Practices (HIIP)	Representations	Deliberate Fractice	Teaching About Problem Solving
Prin	Curriculum	Addition Subtraction	Multiplication Division	Proportional Reasoning
ermediate	High-Impact Instructional Practices (HIIP)	Math Conversations Tools and Representations	Direct Instruction Deliberate Practice	Problem Solving Tasks & Experiences Teaching About Problem Solving
Junior/ Intermediate	Curriculum	Multiplication Division	Fractions Decimals	Spatial Sense Data
		Assessment For Learning		
		Culturally Responsive and Relevant Pedagogy (CRRP), Differentiated Instruction (DI), Indigenous Education, Universal Design for Learning (UDL)		

Division	Focus	First Semester	Second Semester	
High-Impact		Math Conversations	Small Group Instruction	
	Instructional	Tools and Representations	Deliberate Practice	
Secondary	Practices	Direct Instruction	Teaching About Problem Solving	
l ou	(HIIP)			
Curriculum		Integers, Fractions, Decimals	Algebra	
		Algebra	Measurement & Geometry	
		Assessment For Learning		
		Culturally Responsive and Relevant Pedagogy (CRRP), Differentiated		
		Instruction (DI), Indigenous Education,		
		Universal Design for Learning (UDL)		

# **Professional Learning Structure for High Priority Math Schools**

High Priority Math Schools will have a Math Facilitator supporting specific staff and working with students on assigned days throughout the entire year. Math Facilitators are expected to attend full day learning sessions every 2 weeks (Day 5) and will also be expected to participate in online Ministry learning sessions. It is highly recommended that Principals meet regularly with the Math Facilitator to check-in on needs, monitor student progress, and support with next steps. Principals are also asked to lead this work through the School Improvement Plan, co-plan and participate in learning sessions, develop a plan to support students with EQAO, and share progress with the school's Superintendent. Professional learning for staff will be supported by the Math Facilitator within the school. This learning can happen in a variety of formats depending on needs (e.g. individual support and/or small group sessions). Math facilitators will also be able to support all Math teachers' learning. In Secondary schools, in addition to supporting Grade 9 teachers and students, some professional learning opportunities will be extended to include teachers of Grade 10 classes. Schools are also encouraged to participate in Ministry learning sessions. These webinars take place during the instructional day and must be supported by the Principal. Release time is a school-based responsibility. These webinars focus on grade specific Mathematics content knowledge for teaching and the use of high-impact instructional and assessment practices to improve student achievement in mathematics.

## **Available Ministry Online Learning Series**

September 18 at 1:30 PM: Math Content Learning Series – Grade 9 October 9 at 1:30 PM: Math Content Learning Series – Grades 3 and 6 November 13 at 1:30 PM: Math Content Learning Series – Grade 9 December 11 at 1:30 PM: Math Content Learning Series – Grades 3 and 6 January 15 at 1:30

PM: Strategic Planning Session with Board Math Leads

February 12 at 1:30 PM: Math Content Learning Series – Grade 9

March 19 at 1:30 PM: Math Content Learning Series – Grades 3 and 6

April 9 at 1:30 PM: Math Content Learning Series – Grade 9 May 15 at 1:30 PM: Math Content

Learning Series – Grades 3 and 6 (

# **Professional Learning Structure for All Other Schools**

For Grades 3, 6, 9 and 10 teachers in the Non-High Priority Math Schools, a series of professional learning sessions will be provided at the system level provided by Math Consultants. Learning sessions will align with the long-range plans above and will involve small groups of teachers from multiple schools. School Math Leads will also be invited to participate in specific learning sessions that will focus on how they can support instructional learning and effective math pedagogy within the school.

# **Additional Learning Opportunities**

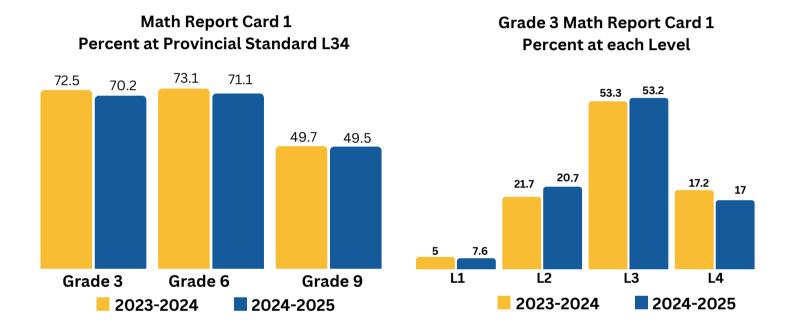
Educators across the system will have the opportunity to access a variety of learning opportunities. After-school learning sessions will be offered throughout the year, focusing on developing specific instructional practices and gap closing measures. HWDSB will offer Additional Qualifications (AQ) courses in Math including Part 1 and Part 2 with tentative plans for the Specialist AQ.

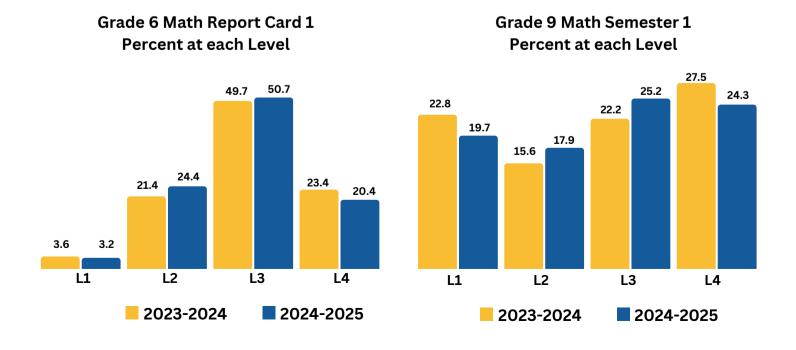


Goal:

# IMPROVE NUMERACY ACHIEVEMENT FOR EVERY STUDENT

# **Math Priority Schools Student Achievement**



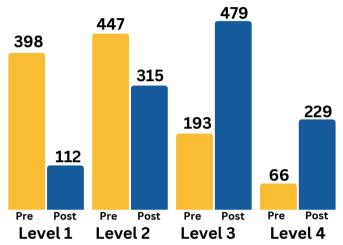




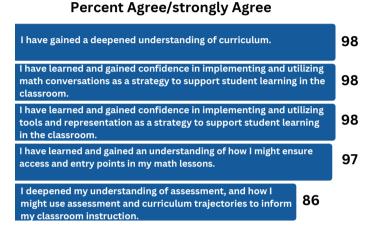
Goal:

# **IMPROVE NUMERACY ACHIEVEMENT FOR EVERY STUDENT**



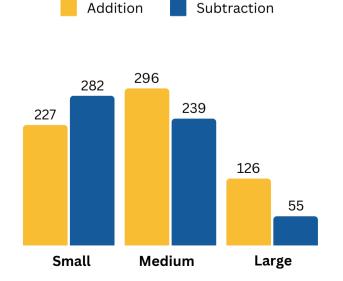


# Grade 3 and 6 Non-Math Priority School Teachers Responses following Professional Development

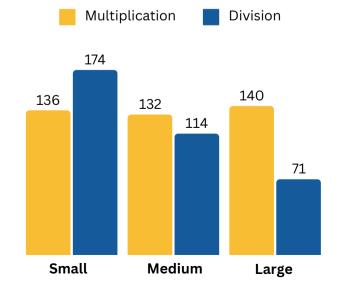


# Student Progress Gap Closing Through Small Group Instruction in Math Priority Schools

Grade 3
Percent of Students Achieving Small to Large Gains



Grade 6
Percent of Students Achieving Small to Large Gains



APPENDIX E: ELEMENTARY ROBOTICS

# 4 rementary HVVDSB WHY ROBOTICS?

- STUDENT ENGAGEMENT
- **ENHANCES PROBLEM-SOLVING SKILLS**
- FOSTERS COLLABORATION AND TEAMWORK



# **CLUB**

- ☐ Find a buddy (or more)
- P/VP Leadership
- Space/Time
- ☐ Tools(e.g., kits, PC/Tablets)
- ☐ Explore Spike App
- Find Participants





# **COMPETE!**

- ☐ Co-coach required
- ☐ P/VP Leadership
- ☐ Space/Time/Tools(e.g., kits, expansion pack, table)
- ☐ Registering your team
- ☐ Funding (applying for grants)
- ☐ Download FLL team meeting
- ☐ Spike App competition ready lessons
- 10 Participants



# **CLASSROOM**

- ☐ P/VP Leadership
- ☐ Explore Lego Lesson plans
- ☐ Tools(e.g., type of kit & number)
- ☐ Classroom management considerations
- ☐ Educational models
- □ Training
- □ Funding



APPENDIX F: SECONDARY ROBOTICS

# HVVDSB WHY ROBOTICS?

- 1 STUDENT ENGAGEMENT
- 2 ENHANCES PROBLEM-SOLVING SKILLS
- 3 FOSTERS COLLABORATION AND TEAMWORK



# **CLUB**

- Least Cost
- ☐ Choice of kit
- ☐ Have a goal/task
- Many students will already be familiar with LEGO kits so it makes a great starting point, use their knowledge.





# **COMPETE!**

- Skills No Cost(board) 12x24
  Field Toronto
- VEX S300 Registration / S300Competition 12x12 Field -Mississauga & St. Catharines
- ☐ <u>FTC</u> \$300 Registration / \$300 Competition - 12x12 Field -
  - Bolton & Mississauga
- FRC S6000 for 2 local comps. 26x54 field - McMaster & Waterloo



BARLOW

# **CLASSROOM**

- □ Largest Cost Up-front Ideal ratio- 3-4 Student:1 kit (LEGO, VEX,FTC Studica Kit)
- ☐ Many students will be familiar with robotics from elementary level
- ☐ Complete lesson plans provided by many kits.

<u>LEGO - VEX - FTC</u>

