St. Clair Catholic
District School Board

REPORT TO BOARD OF TRUSTEES

Scott Johnson, Director of Education

Enclosure 11

Date: **March 26, 2024**

Prepared by: **Jamie Majeski, Assistant Superintendent of Education**

Subject: **Math Achievement Action Plan**

Background

The St. Clair Catholic Math Achievement Action Plan (MAAP) is currently in the implementation phase and has three priority actions:

- Use of high-yield instructional and assessment strategies to support fidelity to the math curriculum;
- Engage in ongoing learning to strengthen math content knowledge for teaching;
- Knowing the learner, and ensuring tasks, interventions and supports are relevant and responsive.

The all schools report, as well as the targeted priority schools report will address all three priority actions identified in the MAAP. The eight schools identified by the Ministry of Education of for this school year are:

Christ the King (Grade 3)
Holy Trinity (Grade 3 & 6)
Sacred Heart - Port Lambton (Grade 6)
St. Angela Merici (Grade 3)
St. Joseph - Tilbury (Grade 3 & 6)
St. Joseph - Corunna (Grade 3)
St. Matthew (Grade 3)
St. Ursula (Grade 3 & 6)

This report will give an update on the implementation of the MAAP.

Board Math Plan

The priority actions for St. Clair Catholic at the Board, School and Classroom levels for the MAAP are highlighted in Appendix A.

Each priority action that was selected as a focus area must have a measurable Key Performance Indicator (KPI). In addition to these KPIs developed at the board level, we must report on provincial KPIs for our eight priority schools. Appendix B shows these KPIs separated into three sections:

- Section A reports on KPIs for all schools

- Section B reports on KPIs for the 8 priority schools
- Section C reports on provincial KPIs for the 8 priority schools

In addition to the MAAP, our three math facilitators, Lisa Aarssen, Katie Curran and Janice Prangley, have been working in all 8 of our priority schools on a rotating basis. Math facilitators have been working to improve math content knowledge for teaching and ensure fidelity to the curriculum by modeling, co-planning and co-teaching math lessons with classroom teachers in Grades 3 and 6.

Ministry Feedback on the Math Achievement Action Plan

Shawn Bredin from the Ministry Math Team gave us the following feedback from our initial report in November:

> The ministry appreciates the focus and attention evident in your plan, including the following areas:
>
> - Gathering data to monitor fidelity to the curriculum, including the implementation of high impact instructional practices and use of diverse assessment tools and strategies;
> - The Priority Schools Plan outlines an approach to professional learning centered on building educator content knowledge and capacity in teaching math, specifically by enhancing professional learning communities that support teachers in using a variety of assessment opportunities to inform lesson planning and use of high-impact instructional practices.
>
> Shawn Bredin, Provincial Math Action Lead

One-on-one meetings and strategic planning sessions with the Ministry math team will continue throughout the rest of the school year.

Monitoring Progress

The St. Clair Catholic MAAP supports the Student Achievement Plan, as well as the strategic plan and directly aligns with improving students' achievement in mathematics.

The Ministry requires that the St. Clair Catholic MAAP be presented to Executive Council, followed by the Board of Trustees. All portions of the math plan will be submitted two more times this year:

Progress: March 28, 2024
Final: July 15, 2024

Additional Math Actions

For the remainder of the school year, the following actions will support mathematics achievement across our system:

- Math school visits, including school superintendent, principal / vice-principals and board math lead using a framework including key reflective questions, classroom learning visits and professional dialogue to support school principal role as math instructional leader;
- Math Facilitators will continue to create and share math learning resources, including mathematical processes and EQAO support and practice;
- Continued support using our digital math tools - MathUP, Symphony Math and KnowledgeHook;
- Renewing our digital math tool contract with KnowledgeHook;
- Cross-curricular math portions in secondary PA days;
- Math content knowledge for teaching professional development in Ministry sessions;
- Strategic planning sessions for board math leads / teams facilitated by the Ministry math action team;
- Collaborative planning sessions for secondary math teachers;
- In-classroom support for students in priority schools and grade 9 students in secondary schools;
- Targeted after-school math tutoring sessions for grade 9 students.

Recommendation

That the St. Clair Catholic District School Board receive the report: *Math Achievement Action Plan,* **for information.**

Appendix A: Math Achievement Action Plan - Priority Actions

Priority Action: Ensuring fidelity of curriculum implementation and use of instructional and assessment practices with a proven track record of enhancing student achievement	**Priority Action:** Engaging in ongoing learning to strengthen mathematics content knowledge for teaching	**Priority Action:** Knowing the mathematics learner, and ensuring mathematical tasks, interventions and supports are relevant and responsive
• How are all educators throughout the system focused on developing a comprehensive understanding and precise implementation of the mathematics curriculum? • How do grade, course, and daily lesson plans reflect the current curriculum,including the mathematical processes and connections between curriculum strands?	• What systems, supports, and resources are available to support teachers and leaders in determining a focus area for their math content knowledge development? • How are all educators engaged in ongoing learning that strengthens their own mathematics knowledge, skills, and attitudes about math teaching and learning?	• How is student assessment data and prior mathematics knowledge used to guide interventions and planning? • How do educators learn about the mathematics strengths, needs and interests of all students to inform their instructional decisions? • How are educators supporting inclusion and engagement for all students, especially those with diverse learning needs?
Board • Prioritize understanding of the curriculum and the continuum of learning across grades • Align resources, including staffing, with mathematics priorities • Provide guidelines, resources and supports for mathematics curriculum- aligned long-range plans, unit plans, and lesson plans • Leverage digital math resources to support curriculum-linked practice at home	**Board** • Utilize student achievement data and student work to establish focus areas for mathematics professional learning • Understand the importance of the relationship between mathematics content knowledge and effective mathematics instruction, as it relates to student achievement • Prioritize mathematics content knowledge for teaching in professional learning opportunities and in allocation of resources, including staffing	**Board** • Align Math Improvement Action Plan with board improvement planning, including using student assessment and demographic data to identify areas of focus • Build capacity in data analysis resources to understand mathematics achievement from a variety of sources, including alignment between EQAO, report cards, and locally-developed assessment tools/tasks • 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 • Develop a system-wide attendance strategy for students with more than 10 days of absences as part of board's existing prolonged absence strategy

School • Directly connect long-range plans, course outlines, lesson plans, and reporting to current curriculum expectations (e.g., educators consult the Curriculum and Resources website regularly to ensure alignment) • Engage in ongoing professional learning (e.g., in grade/division/ department meetings, learning teams, classroom visits) on the curriculum, including making connections across strands • Make intentional staffing decisions to ensure teachers of key grades have deep understanding of the curriculum, including understanding instructional practices to effectively teach and assess curriculum concepts and skills	**School** • Collaborate with Board Math Lead to identify school/division/grade mathematics content knowledge focus areas, including planning and monitoring associated professional learning • Engage in regular collaborative meetings (e.g., team teaching, collaborative analysis of student work, school and/or board networks, classroom visits) to deepen knowledge of mathematics, curriculum, instructional starting points, and interventions • Engage families and communities to support different ways of understanding and doing mathematics (e.g., families and communities are asked to contribute to planning and execution of family math nights)	**School** • Determine key content areas, informed by EQAO data, including Strands and Skills reports, to determine where students may be struggling most and if there are gaps between classroom and EQAO achievement • Integrate common open and parallel learning tasks across grades/divisions that foster student ownership of mathematics, while ensuring all students have accessible entry points into learning • Monitor and respond to students' perception of and confidence in math (e.g., written surveys, student conferencing, family and community engagements) • Develop processes to identify and monitor achievement of students achieving below Level 2 in mathematics and provide ongoing supports so that students can access grade-level curriculum
Classroom • 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) • Connect instruction and assessment to curriculum expectations and long-term essential mathematical understandings using developmental continuums • Use a variety of assessment tools to inform next steps in curriculum implementation (e.g., teacher prompts on the Curriculum and Resources website, exit cards to inform lesson planning in response to student needs)	**Classroom** • Access resources (e.g., teacher supports on the Curriculum and Resources website), experts (e.g., curriculum consultant, school math facilitator), and professional learning to continuously develop content knowledge for teaching • 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 (e.g., regularly using "think-alouds", making the problem-solving process explicit, integrating math talk prompts and conversations, co-solving mathematics puzzles/ problems with students)	**Classroom** • Adapt lesson planning in response to data collected from multiple, frequent assessment opportunities (e.g., interviews, conversations, student agendas, exit tickets, portfolios, surveys) • Understand and respond to student mathematics strengths, needs and interests using a variety of sources, including the Curriculum and Resources website, Individual Education Plans (IEPs), and collaboration with special education teachers and educational assistants • 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 • Monitor and re-engage students at the earliest sign that attendance is impacting learning (e.g., at 3 days and 6 days of absence) and implement board's 10-day and prolonged absence strategy

Appendix B: Math Achievement Action Plan Key Performance Indicators

Section A: All Schools Report

Strategy	Key Performance Indicator	November Report	March Report
Priority Action 1: Ensuring fidelity of curriculum implementation including the intentional use of proven strategies that support academic math achievement			
Areas of Need:	• Increase the usage of board developed scope and sequence. • Increase knowledge and use of teaching using high yield strategies and a variety of assessment strategies. • Increase knowledge and use of teacher supports available within the online mathematics curriculum.		
Prioritize understanding of the curriculum and the continuum of learning across grades	Percentage of Principals who agree that teachers are using board developed scope and sequence for their instructional planning	100%	94%
Provide guidelines, resources and supports for mathematics curriculum-aligned long-range plans, unit plans, and lesson plans	Percentage of Principals who agree that teachers are using board developed scope and sequence for their instructional planning	100%	94%
Leverage digital math resources to support curriculum-linked practice at home	Number of students accessing KnowledgeHook missions using KnowledgeHook usage metrics.	1671 Missions	5071 Missions (as of Jan31)
Directly connect long-range plans, course outlines, lesson plans, and reporting to current curriculum expectations (e.g., educators consult the Curriculum and Resources website regularly to ensure alignment)	Percentage of Principals who agree that teachers are using board developed scope and sequence for their instructional planning	100%	94%
Engage in ongoing professional learning (e.g., in grade/division/ department meetings, learning teams, classroom visits) on the curriculum, including making connections across strands	Number of principals and teachers who are participating in principal learning team meetings and professional learning communities.	7	25
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)	Percentage of principals who agree that classroom teachers are using high-impact instructional practices in their mathematics instruction.	80%	90%
Use a variety of assessment tools to inform next steps in curriculum	Percentage of principals who agree that teachers are using a variety of	53%	81%

implementation (e.g., teacher prompts on the Curriculum and Resources website, exit cards to inform lesson planning in response to student needs)	assessment tools in their mathematics instruction.		

Strategy	Key Performance Indicator	November Report	March Report
Priority Action 2: Engaging in ongoing learning on mathematics content knowledge for teaching.			
Areas of Need:	• Improve math content knowledge for teaching in elementary by infusing into modeled and co-taught lessons by math facilitators (in person and posted for non-priority schools) • Improve math content knowledge for teaching in elementary and secondary through PLCs and use of embedded content knowledge in MathUP resource		
Utilize student achievement data and student work to establish focus areas for mathematics professional learning	Number of times math teachers are being included in math professional learning communities throughout the year.	7	7 (no release time)
Understand the importance of the relationship between mathematics content knowledge and effective mathematics instruction, as it relates to student achievement	Number of teachers who take a math AQ this year.	0	0
Collaborate with Board Math Lead to identify school/division/grade mathematics content knowledge focus areas, including planning and monitoring associated professional learning	Percentage of principals who agree that collaborating with the Board Math Lead has helped to identify mathematics content focus areas, including planning and monitoring associated professional learning.	0%	56%
Engage in regular collaborative meetings (e.g., team teaching, collaborative analysis of student work, school and/or board networks, classroom visits) to deepen knowledge of mathematics, curriculum, instructional starting points, and interventions	Number of times math teachers are being included in math professional learning communities throughout the year.	7	7 (no release time)
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 (e.g., regularly using "think-alouds", making the problem-solving process explicit, integrating math talk prompts and conversations, co-solving mathematics	Percentage of principals who agree that students are excited to learn math.	47%	63%

puzzles/ problems with students)			

Strategy	Key Performance Indicator	November Report	March Report
Priority Action 3: Knowing the mathematics learner, and ensuring mathematical tasks, interventions and supports are relevant and responsive.			
Areas of Need:	• Improve understanding of Social-Emotional Learning strand in mathematics • Improve understanding of teaching through mathematical processes for all teachers and principals through PLCs and math based principal learning teams • Increase use of differentiation of instruction and parallel tasks using MathUP as a resource		
Align Math Improvement Action Plan with board improvement planning, including using student assessment and demographic data to identify areas of focus	Percentage of principals who agree that the Math Improvement Action Plan supports the board Student Achievement Plan.	100%	100%
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	Number of teachers who are using KnowledgeHook for at missions at school / home, using KnowledgeHook metrics	318 teachers	334 teachers
Integrate common open and parallel learning tasks across grades/divisions that foster student ownership of mathematics, while ensuring all students have accessible entry points into learning	Percentage of principals who agree that teachers are using parallel tasks in their classrooms to support all students.	47%	63%
Monitor and respond to students' perception of and confidence in math (e.g., written surveys, student conferencing, family and community engagements)	Percentage of students who agree to the statement "I like math" using a social-emotional learning survey.	73%	75%
Adapt lesson planning in response to data collected from multiple, frequent assessment opportunities (e.g., interviews, conversations, student agendas, exit tickets, portfolios, surveys)	Percentage of principals who agree that teachers are using multiple, frequent and varied assessment opportunities with students.	53%	81%

Section B: Priority Schools Report:

Names of Priority Schools:

• Christ The King (Gr.3) • Holy Trinity (Gr3) • Holy Trinity (Gr6) • Sacred Heart – Port Lambton (Gr6) • St. Angela Merici (Gr3) • St. Joseph – Corunna (Gr3)	• St. Joseph – Tilbury (Gr3) • St. Joseph – Tilbury (Gr6) • St. Matthew (Gr3) • St. Ursula (Gr3) • St. Ursula (Gr6)

Strategy	Key Performance Indicator	November Report	March Report
Priority Action 1: Ensuring fidelity of curriculum implementation including the intentional use of proven strategies that support academic math achievement			
Areas of Need:	• Increase the usage of the board developed scope and sequence K-8 • Increase knowledge and use of teaching using high yield strategies and a variety of assessment strategies		
Prioritize understanding of the curriculum and the continuum of learning across grades	Percentage of Principals who agree that teachers are using board developed scope and sequence for their instructional planning	Considerable Progress	Fully Implemented
		Somewhat Effective	Effective
		100%	83%
Provide guidelines, resources and supports for mathematics curriculum- aligned long-range plans, unit plans, and lesson plans	Percentage of Principals who agree that teachers are using board developed scope and sequence for their instructional planning	Fully Implemented	Fully Implemented
		Effective	Effective
		100%	83%
Leverage digital math resources to support curriculum-linked practice at home	Number of parents / students accessing KnowledgeHook missions using KnowledgeHook usage metrics.	Little to No progress	Little to No Progress
		Unsure Effectiveness	Unsure Effectiveness
		157 parent connections	200 parent connections
Directly connect long-range plans, course outlines, lesson plans, and reporting to current curriculum expectations (e.g., educators consult the Curriculum and Resources website regularly to ensure alignment)	Percentage of Principals who agree that teachers are using board developed scope and sequence for their instructional planning	Considerable Progress	Fully Implemented
		Somewhat Effective	Effective
		100%	83%
Engage in ongoing professional learning (e.g., in grade/division/ department meetings, learning teams, classroom visits) on the curriculum, including making connections across strands	Number of principals and teachers who are participating in principal learning team meetings and professional learning communities.	Little to No Progress	Little to No Progress
		Unsure Effectiveness	Effective
		3	8
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)	Percentage of principals who agree that classroom teachers are using high-impact instructional practices in their mathematics instruction.	Little to No Progress	Considerable Progress
		Unsure Effectiveness	Effective
		76%	96%

Use a variety of assessment tools to inform next steps in curriculum implementation (e.g., teacher prompts on the Curriculum and Resources website, exit cards to inform lesson planning in response to student needs)	Percentage of principals who agree that teachers are using a variety of assessment tools in their mathematics instruction.	Considerable Progress	Considerable Progress
		Unsure Effectiveness	Effective
		33%	83%

Strategy	Key Performance Indicator	November Report	March Report
Priority Action 2: Engaging in ongoing learning on mathematics content knowledge for teaching.			
Areas of Need:	• Improve math content knowledge for teaching in elementary by infusing into modeled and co-taught lessons by math facilitators (in person and posted for non-priority schools) • Improve math content knowledge for teaching in secondary through PLCs and use of embedded content knowledge in MathUP resource		
Utilize student achievement data and student work to establish focus areas for mathematics professional learning	Number of times math teachers are being included in math professional learning communities throughout the year.	Not Yet Implemented	Not Yet Implemented
		Unsure Effectiveness	Unsure Effectiveness
		0	0
Collaborate with Board Math Lead to identify school/division/grade mathematics content knowledge focus areas, including planning and monitoring associated professional learning	Percentage of principals who agree that collaborating with the Board Math Lead has helped to identify mathematics content focus areas, including planning and monitoring associated professional learning.	Little to No Progress	Considerable Progress
		Unsure Effectiveness	Effective
		0	83%
Engage in regular collaborative meetings (e.g., team teaching, collaborative analysis of student work, school and/or board networks, classroom visits) to deepen knowledge of mathematics, curriculum, instructional starting points, and interventions	Number of principals and teachers attending collaborative meetings.	Not yet Implemented	Fully Implemented
		Unsure Effectiveness	Effective
		3	63
Model a positive and curious learning stance with mathematics to create an environment where students	Percentage of principals who agree that students are excited to learn math.	Considerable Progress	Considerable Progress

are excited to learn mathematics and develop into confident math learners (e.g., regularly using "think-alouds", making the problem-solving process explicit, integrating math talk prompts and conversations, co-solving mathematics puzzles/ problems with students)		Effective	Effective
		50%	83%

Strategy	Key Performance Indicator	November Report	March Report
Priority Action 3: Knowing the mathematics learner, and ensuring mathematical tasks, interventions and supports are relevant and responsive.			
Areas of Need:	• Improve understanding of Social-Emotional Learning strand in mathematics • Increase use of differentiation of instruction and parallel tasks using MathUP as a resource		
Align Math Improvement Action Plan with board improvement planning, including using student assessment and demographic data to identify areas of focus	Percentage of principals who agree that the Math Improvement Action Plan supports the board Student Achievement Plan.	Fully Implemented	Fully Implemented
		Unsure Effectiveness	Somewhat Effective
		100%	100%
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	Number of teachers who are using KnowledgeHook for at missions at school / home, using KnowledgeHook metrics	Considerable Progress	Considerable Progress
		Unsure Effectiveness	Effective
		318 teachers	335 teachers
Integrate common open and parallel learning tasks across grades/divisions that foster student ownership of mathematics, while ensuring all students have accessible entry points into learning	Percentage of principals who agree that teachers are using parallel tasks in their classrooms to support all students.	Little to No Progress	Considerable Progress
		Unsure Effectiveness	Somewhat Effective
		33%	83%
Monitor and respond to students' perception of and confidence in math (e.g., written surveys, student conferencing, family and community engagements)	Percentage of students who agree to the statement "I like math" using a social-emotional learning survey.	Considerable Progress	Fully Implemented
		Unsure Effectiveness	Effective
		73%	73%
Adapt lesson planning in response to data collected from multiple, frequent assessment opportunities (e.g., interviews, conversations, student agendas, exit tickets, portfolios, surveys)	Percentage of principals who agree that teachers are using multiple, frequent and varied assessment opportunities with students.	Considerable Progress	Considerable Progress
		Unsure Effectiveness	Effective
		33%	83%

Section C: Priority Schools Provincial Key Performance Indicator Report

Indicator #1: % of students in each level of achievement (R, L1, L2, L3, L4) in math based on report card 1 data from the current year (Grade 3 & 6)

Initial - June 2023
Progress - Term 1 2023-24
Final - Term 2 2023-24

Indicator #2: Percentage of students whose attendance rate is at or above 90% in the current year (Grade 3 & 6)

Indicator #3: Percentage of students who agree with the statement "I am good at math." (Grade 3 & 6)

School	Report	Grade	Level of Achievement (2023-24 Term 1)					Attendance Rate	Math Attitude & Confidence
			R	L1	L2	L3	L4		
Christ The King	Initial	3	0%	0%	5%	62%	33%	82%	48%
	Progress		0%	0%	9%	43%	48%	79%	95%
	Final								
Holy Trinity	Initial	3	0%	3%	34%	58%	5%	77%	59%
	Progress		0%	13%	28%	38%	21%	79%	65%
	Final								
Holy Trinity	Initial	6	2%	7%	33%	51%	7%	65%	38%
	Progress		0%	6%	39%	19%	35%	75%	57%
	Final								
Sacred Heart (PL)	Initial	6	0%	0%	23%	46%	31%	69%	47%
	Progress		0%	29%	14%	21%	36%	64%	57%
	Final								
St. Angela Merici	Initial	3	2%	0%	0%	42%	56%	71%	60%
	Progress		0%	8%	11%	51%	30%	83%	86%
	Final								

St. Joseph (Corunna)	Initial	3	0%	7%	17%	34%	41%	75%	47%
	Progress		0%	3%	19%	68%	10%	65%	79%
	Final								
St. Joseph (Tilbury)	Initial	3	11%	11%	11%	50%	17%	47%	47%
	Progress		9%	0%	18%	64%	9%	77%	67%
	Final								
St. Joseph (Tilbury)	Initial	6	0%	10%	30%	50%	10%	70%	53%
	Progress		0%	20%	20%	30%	30%	73%	70%
	Final								
St. Matthew	Initial	3	6%	3%	18%	48%	24%	67%	71%
	Progress		9%	16%	28%	44%	3%	66%	71%
	Final								
St. Ursula	Initial	3	3%	21%	21%	38%	18%	71%	58%
	Progress		0%	15%	32%	26%	26%	65%	88%
	Final								
St. Ursula	Initial	6	0%	6%	46%	31%	17%	68%	40%
	Progress		0%	3%	42%	36%	19%	65%	57%
	Final								