



Date: March 19, 2025 **Agenda Item:** 8.2

To: Board of Trustees

From: Shawna Warren, Superintendent

Originator(s): Jonathan Konrad, Deputy Superintendent, Education Services
Nicole Farwell, Coordinator, Curriculum

Subject: **Numeracy Support in Sturgeon Public Schools, 2024/25**

Background:

Alberta Education defines numeracy as the ability, confidence and willingness to engage with quantitative and spatial information to make informed decisions in all aspects of daily living. A numerate individual has the confidence and awareness to know when and how to apply quantitative and spatial understandings at home, at school, at work and in the community.

The Numeracy Report provides an overview of the Division's numeracy intervention and instructional processes, aligned to the 2024/25 Education Plan goal of promoting empowered learning environments for staff and students. The report highlights current screening and intervention practices, recent Provincial Achievement Test (PAT) and Diploma Examination results in mathematics and planned supports aligned with new curriculum implementation.

In addition, points of advocacy have been identified for consideration by the Board of Trustees. These reflect key system challenges related to provincial screening tools, curriculum rollout and funding for intervention. Trustees may choose to advance these advocacy priorities in conversations with Alberta Education and other government representatives.

Status & Relationship to Superintendent Leadership Quality Standard (SLQS):

This report aligns with the [SLQS](#) in the following way:

COMPETENCY: (3) Visionary Leadership
INDICATORS: a. ensuring that the vision is informed by research on effective learning, teaching and leadership; and
 c. promoting in the school community a common understanding of and support for the school authority's goals, priorities and strategic initiatives.

COMPETENCY: (4) Leading Learning
INDICATORS: c. ensuring that all instruction in the school authority addresses learning outcomes outlined in programs of study;
 e. ensuring that staff have access to resources, programs and expertise to support them in meeting their professional

responsibilities and in addressing the learning needs of all students;
and
g. ensuring school authority student assessment and evaluation procedures are fair, appropriate, evidence-informed and used to enhance learning, teaching and leadership.

COMPETENCY: (6) School Authority Operations and Resources
INDICATORS: e. establishing data-informed strategic planning and decision-making processes that are responsive to changing contexts.

COMPETENCY: (7) Supporting Effective Governance
INDICATORS: d. ensuring that the board's plans, resource allocations, strategies and procedures lead to the achievement of its goals and priorities; and
f. supporting the board in the fulfilment of its governance functions in the fiduciary, strategic and generative realms.

Governance Implications:

[Education Act](#)

Courses, programs of study, etc.

18(1) The Minister may do the following:

- (a) prescribe courses or programs of study
- (b) prescribe requirements for the granting of credits, certificates and diplomas, including requirements for high school completion
- (c) prescribe requirements with respect to course sequencing or advancement
- (d) authorize learning and teaching resources for use in schools

Board responsibilities

33(1) A board, as a partner in education, has the responsibility to

- (a) deliver appropriate education programming to meet the needs of all students enrolled in a school operated by the board and to enable their success
- b) be accountable and provide assurances to students, parents, the community and the Minister for student achievement of learning outcomes
- (c) provide, where appropriate, for the engagement of parents, students, staff and the community, including municipalities and the local business community, in board matters, including the board's plans and the achievement of goals and targets within those plans
- (e) provide a continuum of supports and services to students that is consistent with the principles of inclusive education
- (h) establish and maintain governance and organizational structures that promote student well-being and success, and monitor and evaluate their effectiveness

Superintendent of schools

222 (5) The superintendent shall supervise the operation of schools and the provision of education programs in the school division, including, but not limited to, the following:

(a) implementing education policies established by the Minister

(b) ensuring that students have the opportunity in the school division to meet the standards of education set by the Minister

(d) providing leadership in all matters relating to education in the school division

(6) The superintendent shall report to the Minister with respect to the matters referred to in subsection (5)(a) to (d) at least once a year.

[Board Policy 105: Vision, Mission and Values](#)

MISSION

Working together as a team of trustees, parents, community, staff and students, we create safe, respectful and collaborative learning environments where students are prepared to meet and excel at the challenges presented by the global community.

VALUES

Excellence in teaching. We know that magic can happen when students are engaged, excited and feel connected to their learning and their teachers.

Shared responsibility. We all have an important part to play in the education process. Working together, we strive for excellence so we can build a stronger future for us all.

Learning choices. One size does not fit all. We recognize that to prepare students for their futures, we must meet their diverse needs along the way.

[Board Policy 225: Role of the Board](#)

Education Planning and Programming

2. Annually review and approve education goals including the Annual Education Plan.

3. Set governance standards for reviewing and approving educational programming.

Assurance and Accountability

4. Develops and implements a reporting and accountability system on any matter the Minister prescribes;

5. Disseminates any information, in the reports and accounts produced, under the reporting and accountability system to students, parents, electors and/or the Minister in the manner the Minister prescribes; and

6. Reviews Division performance, on an ongoing basis, and approves the Annual Education Results Report.

Supports and Services

17. Supports the removal of barriers with learning partners and within learning environments.

18. Develops ongoing relationships with government, school and system leaders, families and community partners to strengthen and renew their understanding, skills and abilities to create flexible and responsive learning environments.

Collaboration

20. Represents the community's needs, hopes and desires for education.

21. Supports the schools' programs, needs and desires to the community.

22. Acts as an advocate for public education and the Division.

23. Identifies issues for advocacy on an ongoing basis.

[Board Policy 700: Superintendent of Schools](#)

The Superintendent of Schools, as referred to in the Education Act, is the Chief Executive Officer of the Board of Trustees and Chief Education Officer of the Division. The Superintendent directly reports to the Board of Trustees and is accountable to the Board of Trustees on behalf of students and the public, for the total operation of the school system in a manner that is consistent with the requirements of the Education Act, Alberta Education regulations, the Superintendent Leadership Quality Standard, Board policies, Division vision, mission and values, and the Education Plan goals.

[Administrative Procedure 240: System, School and Program Evaluation](#)

Schools, programs and the school system may be evaluated to determine if objectives and outcomes are appropriate for the attainment of a high level of student achievement and for the optimal use of physical, human and economic resources.

[Administrative Procedure 241: Annual Education Results Report](#)

Sturgeon Public School Division is required by Alberta Education to prepare an Annual Education Results Report (AERR). As part of a continuous improvement cycle school divisions are expected to assess and interpret the results arising from implementing the Three-Year Education Plan and report on the progress toward achieving identified outcomes. School divisions must also report on their performance and the actions taken to meet their responsibilities in key assurance domains.

[Administrative Procedure 242: Three-Year Education Plan](#)

The Division is required by Alberta Education to prepare an education plan that aligns with the Alberta Education Three-Year Business Plan and focus on the priorities for student learning in the Division. The planning and reporting processes used will reflect the guiding principles, domains, and enabling processes outlined in Alberta Education's Assurance Framework.

Administration is prepared to respond to questions at the March 19, 2025, Public Board meeting.

Attachment(s):

1. Numeracy Support in Sturgeon Public Schools, 2024/25



Numeracy Support in Sturgeon Public Schools

Numeracy support in Sturgeon Public Schools aligns with the 2024/25 Education Plan goal of creating empowered learning environments for both staff and students. This work focuses on the early identification of student needs through numeracy screeners and targeted supports, alongside the implementation of the new K-6 curriculum to strengthen instruction and improve student outcomes.

Numeracy Assessments in 2024/25

Alberta Education Numeracy Screener

Students in grades 1-4 will complete the Alberta Education Numeracy Screener in September, January and May. Kindergarten students will complete the Alberta Education Numeracy Screener in January. This screener assesses a broad range of number skills in students from early verbal counting to arithmetic fluency to address early gaps in number knowledge.

Math Intervention/Programming Instrument (MIPI)

Due to the shift to a new math curriculum, schools with Grades 7-10 were given the option to use the MIPI screener in September to support local programming decisions. As this tool is no longer used consistently across all schools, and results are not reported to Central Office, division-wide year-over-year MIPI data is no longer available.

As part of the Division's planned supports, exploration of a new universal screener to replace the MIPI is underway.

Alberta Education Numeracy Screener (in English)

The following analysis summarizes key trends from the Alberta Education Numeracy Screener results in English programming.

Require Additional Support (%)	Fall Norms			Change Year over year	Winter Norms			Change Year over year
	Sept. 2022	Sept. 2023	Sept. 2024		January 2023	January 2024	January 2025	
Kindergarten				n/a			20	n/a
Gr 1			23	n/a	33	18	20	+2%
Gr 2	36	26	17	-9%			22	n/a
Gr. 3	28	17	20	+3%			18	n/a
Gr. 4		29	23	-6%			24	n/a





Analysis of the Alberta Education Numeracy Screener data shows fluctuations across grades, with some year-over-year improvements (e.g., Grade 4 reduced by 6%) and areas where additional support may be needed (e.g., Grade 1 increased by 2%). The addition of Kindergarten data provides an earlier look at numeracy development, highlighting a need to continue building early numeracy skills.

Alberta Education Numeracy Screener (in French Immersion)

The following analysis highlights trends within French Immersion programs based on Alberta Education Numeracy Screener results.

Require Additional Support (%)	Fall Norms			Change Year over year	Winter Norms			Change Year over year
	Sept. 2022	Sept. 2023	Sept. 2024		January 2023	January 2024	January 2025	
Kindergarten				n/a			9	n/a
Gr 1			42	n/a	61	35	16	-19%
Gr 2	58	56	0	-56%			0	n/a
Gr. 3	28	25	11	-14%			11	n/a
Gr. 4		10	7	-3%			4	n/a

French Immersion data shows notable improvements, particularly in Grade 1 (a reduction from 35% to 16% at-risk), but also highlights persistent challenges in upper grades that will require continued attention.

2023/24 Provincial Achievement Tests and Diploma Results - Mathematics

2024 Provincial Achievement Tests by Course All Students		Sturgeon Public School Division			Alberta		Sturgeon Public School		
		2023	2024	Prev 3 Year Average	2024	Prev 3 Year Average	AB Gap	Previous Year	To SPS Average
Course	Measure						+/-	+/-	+/-
Mathematics 9	Number Writing	287	392	316	58577	55447			
	Acceptable Standard %	59.2	43.6	53.8	52.7	54.4	-9.1	-15.6	-10.2
	Standard of Excellence %	12.5	7.1	11.4	14.0	13.5	-6.9	-5.4	-4.3
K&E Mathematics 9	Number Writing	33	30	36	1967	1815			
	Acceptable Standard %	81.8	70.0	75.0	52.2	52.7	-17.8	-11.8	-5.0
	Standard of Excellence %	39.4	3.3	36.1	9.9	11.3	-6.6	-36.1	-32.8





2024 Diploma Results by Course All Students		Sturgeon Public School Division			Alberta		Sturgeon Public School		
		2023	2024	Prev 3 Year Average	2024	Prev 3 Year Average	AB Gap	Previous Year	To Average
Course	Measure						+/-	+/-	+/-
Mathematics 30-1	Number Writing	67	76	67	21035	19763			
	Acceptable Standard %	67.2	53.9	67.2	75.4	70.8	-21.5	-13.3	-13.3
	Standard of Excellence %	25.4	7.9	25.4	34.9	29.0	-27.0	-17.5	-17.5
Mathematics 30-2	Number Writing	66	77	66	15676	14418			
	Acceptable Standard %	72.7	58.4	72.7	70.9	71.1	-12.5	-14.3	-14.3
	Standard of Excellence %	10.6	3.9	10.6	15.4	15.2	-11.5	-6.7	-6.7

Analysis of the 2024 PAT and Diploma results in Mathematics indicates that performance in Math 9 and Math 30-1/30-2 is below provincial averages, both at the Acceptable Standard and Standard of Excellence. These results underscore the need for continued focus on foundational math skills and targeted supports as students transition into higher grades.

Teaching and Leading: Implemented Support for Improved Math Instruction

- Continued use of Fact Fluency Kits in Grades K-6 to build basic computation skills.
- Common math manipulatives are available in every K-6 classroom to support hands-on learning and deepen conceptual understanding.
- Pilot group of teachers exploring a new math resource to align with the new curriculum and enhance instructional strategies.
- Development of a division-wide math intervention plan, accessible on the Teaching Resource Hub, to guide targeted student supports.

Planned Supports

Instructional Supports:

The following instructional supports are designed to strengthen mathematics teaching and learning, and to align classroom practices with the new curriculum.

- Focused support on the use of math manipulatives in Grades K-6.
- Targeted supports for piloting teachers and schools as Grades 7-9 implement the new curriculum.
- Continued exploration of a universal screener to replace the MIPI.

Data and Monitoring:

The following data and monitoring strategies will guide instructional responses and division-level planning to address identified student needs.

- Ongoing analysis of assessment data, including development of classroom profiles from screener results.





- In-depth review of Grade 6 PAT results in Fall 2025 to assess the impact of the new curriculum.

Learning Interruption Grant - Numeracy Intervention

For the 2023/24 school year, Sturgeon Public Schools received just over \$30,000 through the Learning Interruption Grant. With this money, SPS has hired one Literacy/Numeracy Intervention teacher to provide daily small group instruction for up to 5-6 weeks to grade 4 students in a pull-out model. Students will be chosen for this extra support based on numeracy screening data and classroom teacher recommendations.

Due to reduced funding this year, only one intervention teacher was hired, limiting support to Grade 4 students. While the intervention model remains targeted and effective, the reduction in staffing limits the division's capacity to provide timely support to all students identified through screening data.

Points of Advocacy for the Board of Trustees

To strengthen numeracy outcomes and ensure Sturgeon Public Schools has the tools and resources needed to support student success, the following areas are identified for Board advocacy with Alberta Education and the Government of Alberta:

1. Rescheduling of K-4 Alberta Numeracy Screeners to October
 - Current Challenge: The September screener timeline does not allow students adequate time to settle into classroom routines before being assessed, potentially skewing results and limiting their value for identifying true learning gaps.
 - Advocacy Ask: Advocate for Alberta Education to adjust the K-4 Numeracy Screener administration timeline to October to enable more accurate assessments and responsive supports.
2. Faster Turnaround of Screener Results from Alberta Education
 - Current Challenge: Delays between completion of the Numeracy Screeners and the return of results hinder schools' ability to provide timely interventions for students identified as needing support.
 - Advocacy Ask: Request that Alberta Education provide schools with Numeracy Screener results within a reasonable and expedited time frame (e.g., within 2-3 weeks) to enable immediate planning and intervention.
3. Phased Rollout of the New Grades 7-12 Mathematics Curriculum





- Current Challenge: A full-scale implementation of the new math curriculum across all grades simultaneously will create significant pressure on teachers, schools, and system supports, impacting the quality of instruction and outcomes.
- Advocacy Ask: Advocate for a gradual, phased implementation of the Grades 7-12 mathematics curriculum (one grade level at a time) to allow time for resource development, professional learning, and thoughtful instructional planning.

Through a continued focus on early identification, targeted interventions, and teacher capacity building, Sturgeon Public Schools is committed to supporting all students in developing strong numeracy skills. Ongoing analysis of assessment data and alignment with the new curriculum will guide Division efforts to address identified gaps and strengthen math outcomes for all learners.

