INTELLECTUAL DEVELOPMENT



NUMERACY INITIATIVES

Surrey Schools partners with teachers to explore evidence-based numeracy instruction and assessment practices. Teachers participated in district-led sessions to: (1) improve their articulation of math goals and competencies, (2) deepen student learning of provincial learning standards, (3) design proficiency scales to communicate growth and concepts, (4) gather evidence of student learning, and (5) broaden their understanding of what constitutes student learning in mathematics.

In Table 1 below, we provide an overview of select numeracy initiatives our district has implemented and evaluated this year.

NUMERACY INITIATIVE	DESCRIPTION
1. Building Thinking Classrooms in Mathematics	Through reading then discussing the professional learning resource, <i>Building</i> <i>Thinking Classrooms in Mathematics</i> at facilitated webinars, teachers learned about and attempted to implement fourteen research-based practices to engage students in deep mathematical thinking.
2. Assessment in Secondary Mathematics	In collaborative inquiry teams, teachers explored ways to change their assessment practices (e.g., creating new summative assessments together; designing standards- based grading systems, rubrics, and learning progressions; determining letter grades/percentages; portfolios; looking at sample student work and other evidence of learning; etc.) to better assess and evaluate what students know and can do within secondary mathematics.
3. Assessment in Elementary Mathematics	In collaborative inquiry teams, teachers implemented standards-based assessment practices (i.e., designing rubrics and learning progressions that communicate quality and growth with respect to learning standards; analyzing sample student work and other evidence of learning through the lens of these rubrics/progressions; etc.) to better assess and evaluate what students know and can do within elementary mathematics.

Table 1. Surrey School District Numeracy Initiatives

Classroom teachers were provided a survey with a series of teaching and assessment practices. Teachers were asked to read each statement and indicate whether they had observed the impact on students' numeracy development as described in the statements. Across all impact statements, at least 90% of the responses from classroom teachers indicated they had observed initiative impacts, with the exception to 1) constructing proficiency scales that communicate growth in their students' capacity to engage in curricular competencies and 2) support with centering assessment practices around gathering evidence of learning rather than gathering points on tasks. Figure 1 provides a breakdown of the impacts the numeracy initiatives had on their teaching and assessment practices.

Figure 1. Percentage of classroom teachers who observed impacts from the Surrey School District Numeracy Initiatives on their assessment and teaching practices, 2020/21

Developing strength-based language and criteria that clearly describes what my students know and can do at each proficiency level	91%	9%
Constructing Proficiency Scales that communicate growth in my students' capacity to engage in curricular competencies	82%	18%
Constructing Proficiency Scales that communicate a developmental progression of concepts and/or a depth of understanding of content	91%	9%
Understanding the meaning of the different Proficiency Scale Levels (i.e., emerging, developing, proficient, and extending) and how these differ from the Expectation Levels (i.e., not yet meeting, minimally meeting, meeting, exceeding) of previous curriculam	91%	9%
Determining and writing clear Learning Goals that address content and competencies (either separately or integrated)	91%	9%
Support in gathering evidence of student learning from these experiences	91%	9%
Support in planning learning experiences that engaged students in curricular competencies	91%	9%
Deepened understanding of the learning standards (content and/or competencies)	91%	9%
Considered many sources of evidence (i.e., conversations, observations, products) when evaluating student learning	91%	9%
Support with centering assessment practices around gathering evidence of learning rather than gathering points on tasks	82%	18%

🔵 Observed 🛛 😑 Not Yet Observed