



School District 8
Kootenay Lake

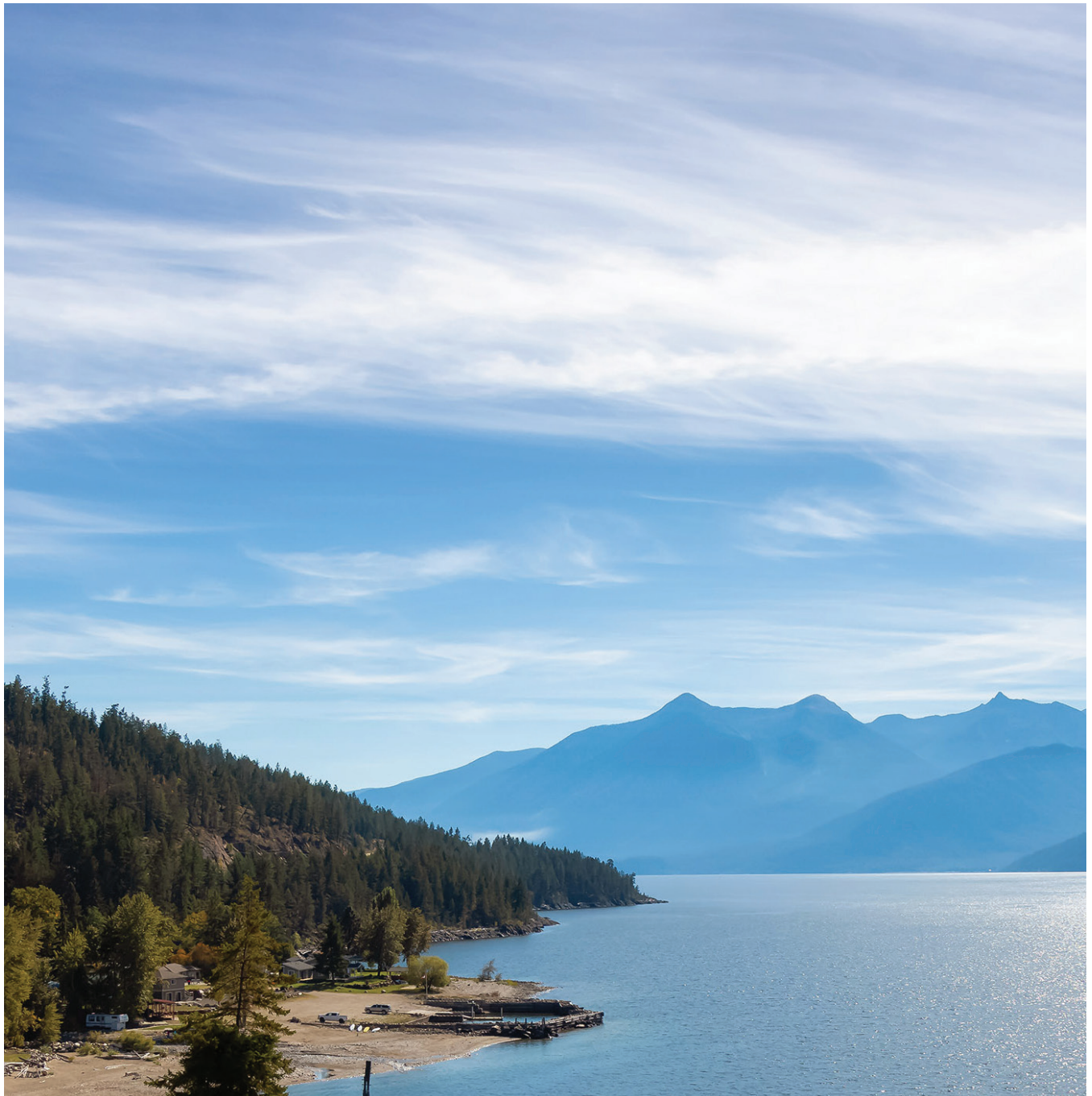
NUMERACY CONTINUOUS LEARNING REPORT 2022-2023

March 14, 2023



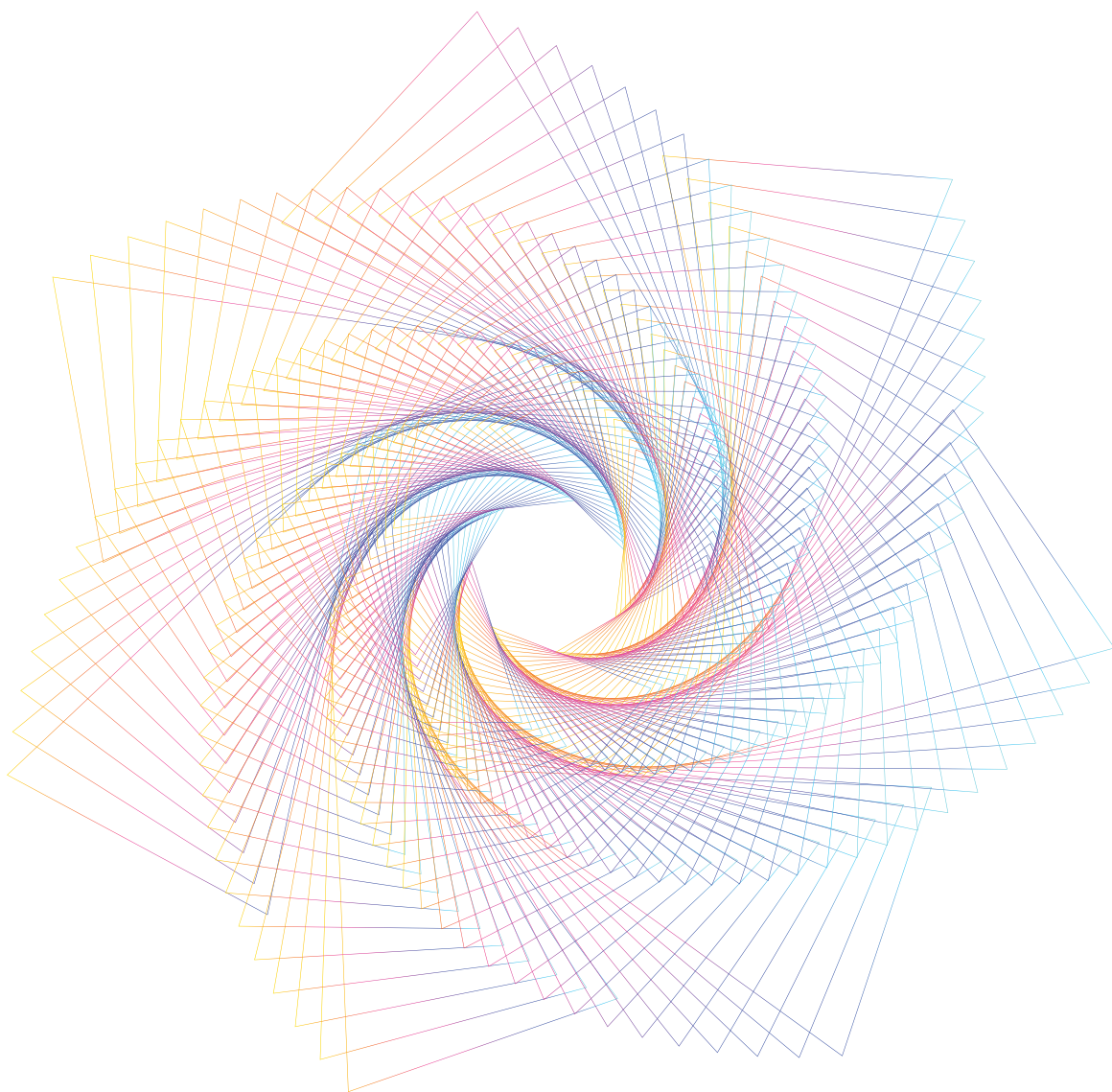
ACKNOWLEDGEMENT

We acknowledge, respect and honour the First Nations in whose traditional territories the Kootenay Lake School District operates and all Aboriginal people residing within the boundaries of School District No. 8.



CONTENTS

ACKNOWLEDGEMENT	i
EXECUTIVE SUMMARY	iii
INTRODUCTION	1
EVIDENCE OF LEARNING	4
CONCLUSION	15
ADDENDUM	16





EXECUTIVE SUMMARY

School District No.8 (Kootenay Lake) (SD8) acknowledges, respects and honours the First Nations in whose traditional territories the Kootenay Lake School District operates and all Aboriginal people residing within the boundaries of School District 8.

Each year, SD8 plans for continuous improvement. SD8 is committed to focusing on excellence for all learners in a nurturing environment. The Board of Education, through the Focus.Learn.Excel initiative, invests significant resources into ensuring that each learner is provided the opportunity to graduate with dignity, purpose, and options for a successful future.

All decisions made by School District No. 8 (Kootenay Lake) are guided by its vision and core values and are based on research and extensive consultation. The District's initiatives and resources are aligned with Ministry of Education and Child Care goals and school plans to support its firm commitment to the mandate of an educated citizen by supporting intellectual, human, and social and career development for all our students. This includes goals for literacy, numeracy, inclusion, and indigenization.

SD8 recognizes that equity is the foundation for

improving learner achievement; it is central to the learner's experience and engagement. Linking learner achievement to equity, inclusion and diversity will increase a learner's well-being, engagement and connection to others and to school.

Numeracy is defined as the ability to understand and apply mathematical concepts, processes, and skills to solve problems in a variety of contexts. The District goal for numeracy from Kindergarten through to Grade 12 is:

"To improve numeracy proficiency for all learners"

Numeracy is important in that "a mathematically literate student recognizes the role that mathematics plays in the world in order to make well-founded judgments and decisions needed by constructive, engaged and reflective citizens" -OECD, PISA Mathematics

If literacy is the foundation for learning, then numeracy is the house built upon that foundation. Being numerate provides access to opportunities, contributes to career advancement and progress in the fields of science and technology.

"The powerful thinkers are those who make connections, think logically, and use space, data, and numbers creatively."¹

1 Mathematical Mindsets: Unleashing students' potential through creative math, inspiring messages and innovative teaching. Boaler, J. John Wiley & Sons. 2015

MATH NIGHT!

On March 2 5:30-6:30

≈ 500

≈ 3000

≈ 120

920

There will be:


- An estimation raffle!

- Parent Tutorials for math!

- Board games!

- Math game kits!

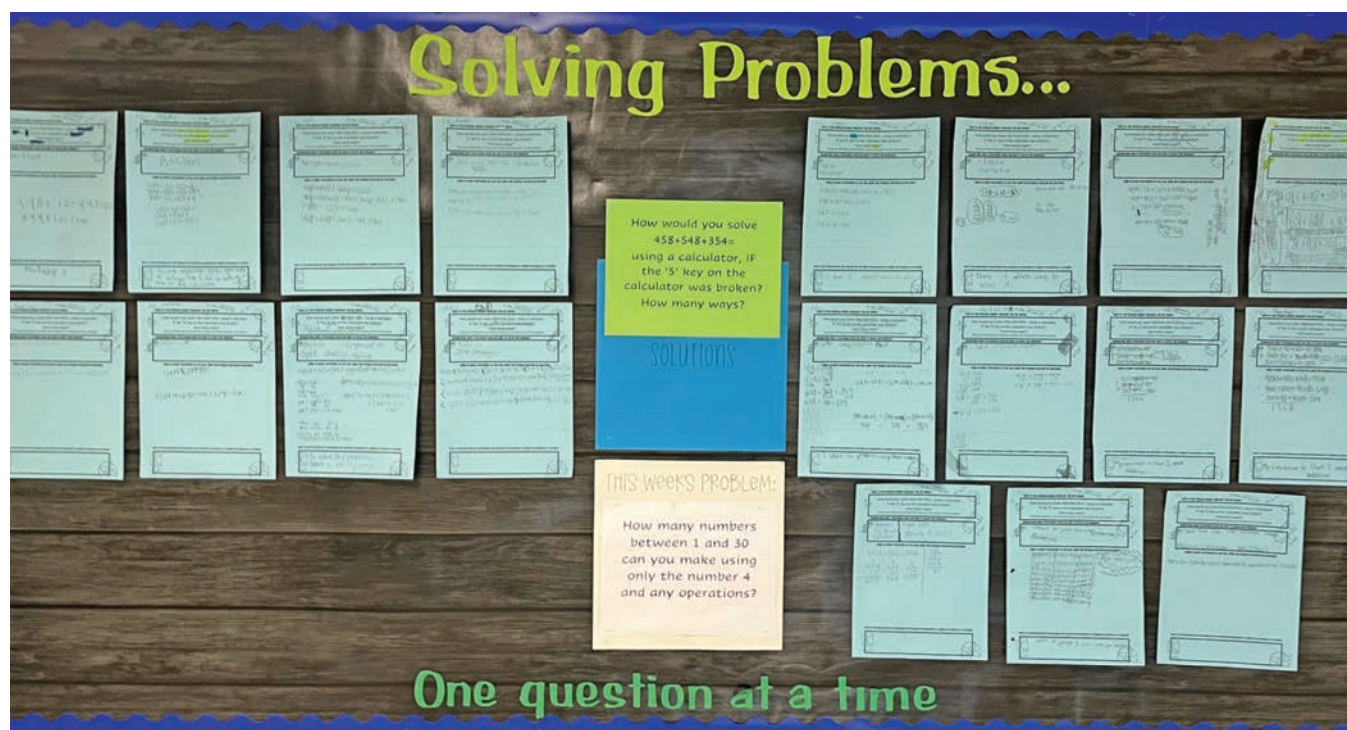
- Wander classrooms

see you there! 



NUMERACY ACTION ITEMS

- Develop a 3-year District Numeracy Plan focused on improving numeracy outcomes for all K-12 learners, in consultation with Aboriginal Education staff, district itinerant staff, and school teams. This plan will be embedded within the 2023-2024 Numeracy Continuous Learning Report.
- Support numeracy for K-12 school teams, district itinerant staff, and Aboriginal Education staff to improve numeracy for all learners through numeracy-specific professional learning.
- Develop an embedded numeracy Assessment for Learning workshop series for middle years teachers and principals.
- Implement a district level K-9 Numeracy Assessment.
- Develop an online numeracy resource hub to support all classroom and non-enrolling teachers.
- Support elementary and middle schools in maintaining high participation rates for provincial assessments and Student Learning Surveys.
- Facilitate bi-annual transition planning meetings with middle and secondary principals.
- Support school teams in developing objectives and strategies to support their school numeracy goal within the context of their School Learning Plan
- Continue to strengthen SD8 community, regional, and provincial connections that support numeracy from birth to grade 12.





INTRODUCTION

Numeracy in SD8

Numeracy is defined as the ability to understand and apply mathematical concepts, processes, and skills to solve problems in a variety of contexts. According to the OECD, “a mathematically literate student recognizes the role that mathematics plays in the world in order to make well-founded judgments and decisions needed by constructive, engaged and reflective citizens.”

–OECD, PISA Mathematics

This report looks at how SD8 learners are doing with respect to numeracy, and provides a description of the supports, resources, and goals that comprise SD8’s commitment to ensuring that numerate students graduate with dignity, purpose, and options.

The report is comprised of district numeracy data from the following data instruments and assessments:

- Early Development Instrument (EDI) is completed by Kindergarten teachers during the spring. It occurs twice in every 3 years. The EDI provides information about Kindergarten learners, as reported by their teachers.
- Foundation Skills Assessments (FSA) is administered annually to students in grades 4 and 7. It provides district level information on how students are achieving in the foundational areas of reading comprehension, writing, and numeracy.
- Student Learning Surveys (SLS) is administered annually to students in grades 3 or 4, 7, 10 and 12. The SLS asks students questions about their school experiences.
- Graduation Numeracy Assessment 10 (GNA) is administered annually to students in grades 10 and 12. It provides broad level information on how students are achieving in numeracy. Students are able to write the GNA three times prior to graduation.



EVIDENCE OF LEARNING

SD8's work in numeracy reflects the goals and objectives of the [Ministry of Education and Child Care \(MoECC\)](#) "[Service Plan 2022-2025](#)"

Ministry Goal 1: All Students Become Educated Citizens

Objective 1.1: Establish and Maintain High and Measurable Standards.

Key Strategy:

- Provide teachers and students with access to updated learning and teaching resources to support ongoing instruction and assessment across the K-12 curriculum.

Ministry Goal 2: Learning Environments Foster Healthy and Effective Learning

Objective 2.1: Implement High Yield Strategies to Support Student Growth and Achievement.

Key Strategies:

- Improve access to quality early learning opportunities for young children and support transitions into the K-12 education system.
- Enhance equity for all learners, including Indigenous learners, learners with diverse abilities, children and youth in care, and English language learners.

Overview of Numeracy in Elementary

Primary (Kindergarten to Grade 3) Program

The primary program in numeracy consists of introducing learners to the skills of basic number sense, computational fluency, patterns and relations. These concepts are introduced in kindergarten and grow with students, expanding in scope and depth of learning as they progress through the grades. Hands-on mathematics manipulatives are used in the classroom to demonstrate, practice and reinforce numerical concepts. In addition, real-world application is emphasized, giving children an understanding of how numerical skills and concepts are used in their daily lives and experiences.

Data

Early Development Instrument (EDI)

The Early Development Instrument (EDI) is a short questionnaire completed by kindergarten teachers in the spring during the school year. This instrument is used not only across SD8, but across Canada and internationally. The purpose of the questionnaire is to measure a child's ability to meet age-appropriate developmental expectations.

The EDI is administered by school districts in a 3-year cycle, called a “Wave”. In SD8 EDI data is collected every 2 out of 3 years. SD8 Kindergarten teachers completed the EDI in 2019–2020 and in 2020–2021.

The complete SD8 EDI Wave 7 data report 2020–2021 can be found [here](#).

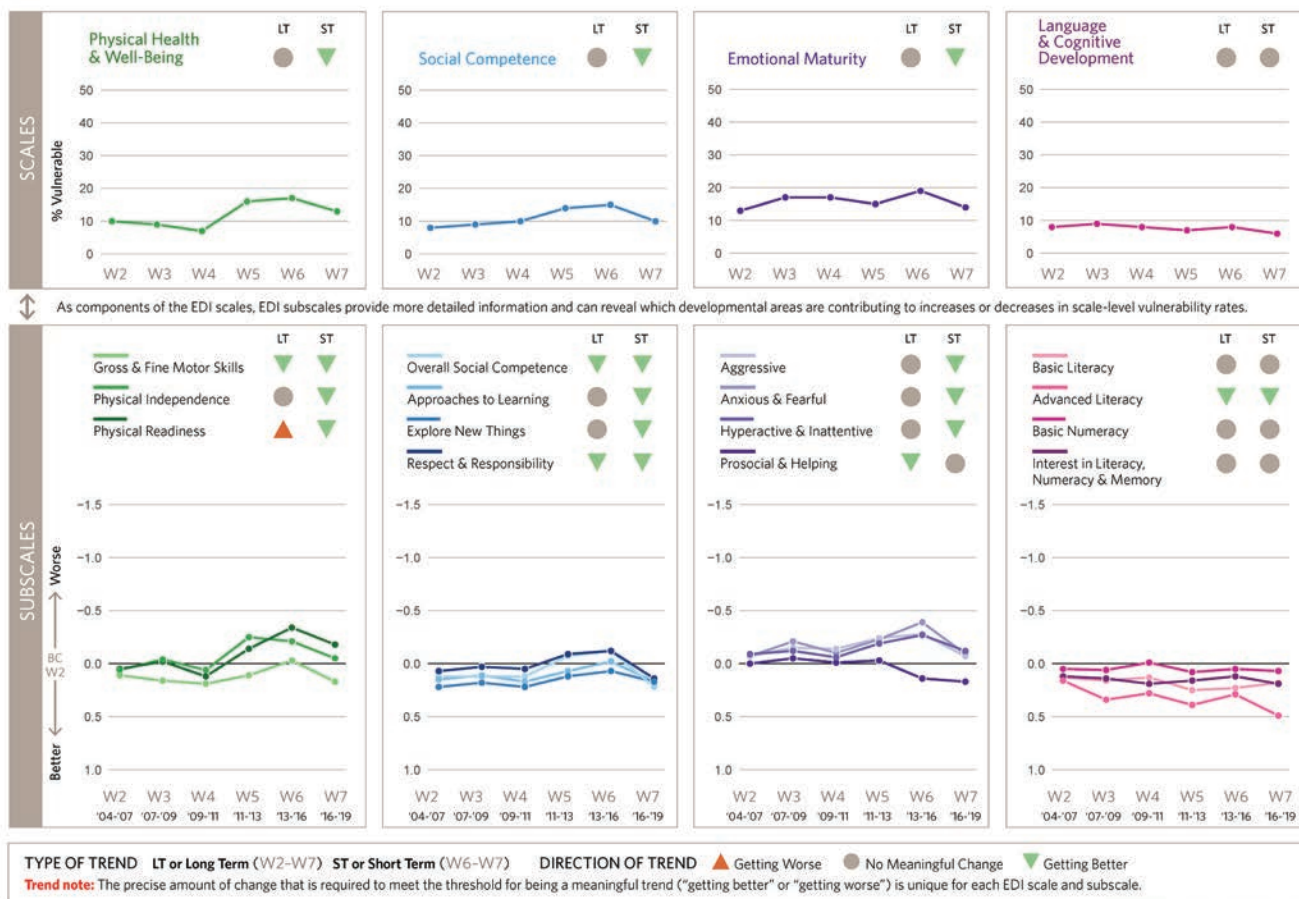
The following EDI data tables pertain specifically to Kindergarten learners from the 2020–2021 school year. The data is disaggregated into neighbourhoods, as follows:

- Creston
- Kootenay Lake Rural (Crawford Bay, Kaslo, Jewett, Salmo, Slocan Valley)
- Nelson

Early Development Instrument (EDI) Wave 7 2021-2022 - Community Data

SCHOOL DISTRICT ■ KOOTENAY LAKE

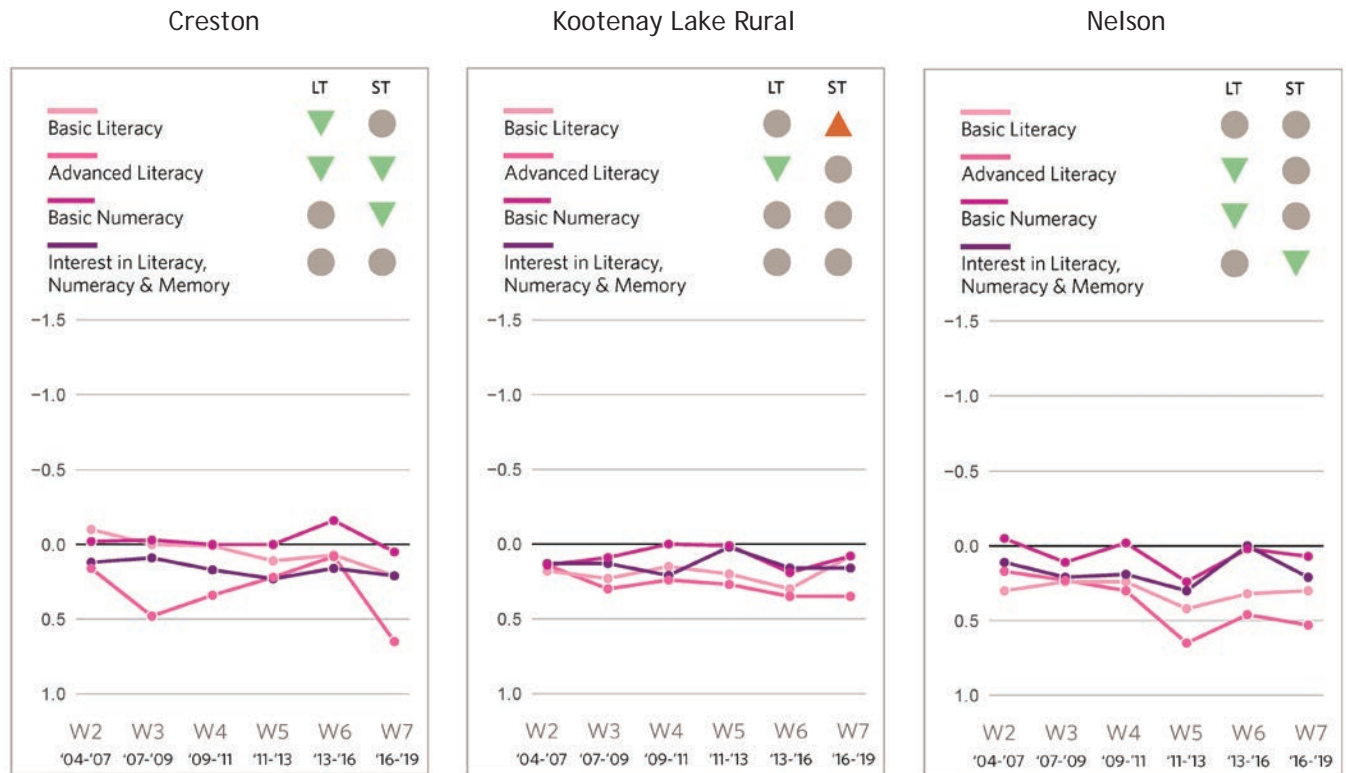
TOTAL EDI W2: 892 W3: 546 W4: 299 W5: 277 W6: 314 W7: 277



EDI data notes:

- A green triangle indicates results are trending positively.
- A grey circle indicates “no meaningful change” from the prior year(s) to date.
- An orange triangle indicates a worsening trend.
- Downward sloping graph lines indicate positive progress, indicating less Kindergarten vulnerability.
- Long term (LT) and short term (ST) trends are also indicated.

Early Development Instrument (EDI) Wave 7 2021-2022 - Community Data (cont.)



Within the three geographic regions or “neighbourhoods” in SD8, EDI data for Creston indicates a positive trend in short-term *Basic Numeracy* and no meaningful change in *Interest in Literacy, Numeracy and Memory*.

For the Kootenay Lake Rural region, the data shows no meaningful change in *Basic Numeracy* and no meaningful change in *Interest in Literacy, Numeracy and Memory*.

EDI data for Nelson indicates a positive long-term trend in *Basic Numeracy* and a positive short-term trend in *Interest in Literacy, Numeracy and Memory*.

Summary of Key Findings

Overall, EDI Wave 7 (2020–2021) Numeracy data indicates that within the Basic Numeracy and Basic Literacy skills and Interest in Literacy, Numeracy and Memory our Kindergarten learners have remained consistent across wave cohorts.

Furthermore, compared to Kindergarten children across BC, an EDI data analysis of 2019–2021 data indicates that SD8 Kindergarten children are less vulnerable in all areas compared to the provincial average. Through the ongoing implementation of programs and supports at the primary level, such as the Early Literacy Profile supporting all learners K–grade 3, SD8 anticipates that this positive trend will continue.

Finally, district school learning plan conversations at school leader meetings, including numeracy updates, will continue to support schools in their numeracy goal.

Action Items Primary (Kindergarten to Grade 3)

- Develop a 3-year District Numeracy Plan focused on improving literacy outcomes for all K-12 learners in consultation with Aboriginal Education staff, district itinerant staff, and school teams through numeracy-specific professional learning.
- Support numeracy for K-12 school teams, district itinerant staff, and Aboriginal Education staff in improving numeracy proficiency for all learners.
- Develop an online numeracy resource hub to support all classroom and non-enrolling teachers.
- Support school teams in developing objectives and strategies to support their school numeracy goal within the context of their School Learning Plan.
- Continue to strengthen SD8 community partnerships and connections that support numeracy from birth to grade 12.



Intermediate (Grades 4–6) Program

Mathematical skills are essential for solving problems in most areas of life. Numeracy in the intermediate (grades 4–6) years focuses on developing a deeper understanding of both factual (content) and process-based (curricular competencies) information needed to solve complex problems. Students practice reasoning mathematically, using their understanding of number, pattern and spatial relationships and analyzing data in order to solve problems. Students also begin applying mathematical thinking to concrete and abstract

concepts and are given opportunities to navigate their world with a mathematical perspective.

Learners with diverse abilities were 28.5% lower than their peers and lower than the ministry's target of greater than 75%.

Reference: [BC Curriculum, Mathematics](#)

Data

The information collected to support student learning in the intermediate years with respect to numeracy include the following:

- Foundation Skills Assessment, Grade 4
- Student Learning Surveys, Grade 4

The Foundation Skills Assessment (FSA) is an annual province-wide assessment of all B.C. students' academic skills in grades 4 and 7, and provides parents, teachers, schools, school districts and the Ministry of Education and Child Care with valuable information on how well students are progressing in the foundation skills of literacy and numeracy.

Reference: [Foundation Skills Assessment \(FSA\)](#)

The Student Learning Survey (SLS) is an annual province-wide census of grades 4, 7, 10 and 12 students, their parents and staff in public schools. The questions have been developed with input from partner groups, teachers and education experts. The Student Learning Survey is a method of obtaining students' opinions about their school experience including questions about the curriculum, school atmosphere, and classroom assessment.

Reference: [BC Student Learning Survey](#)



The following data table provides information about student academic achievement in numeracy, based on the FSA data. In addition, the table includes Student Learning Survey data reported by students, about their mathematics progress. Participation rates for both the FSAs and Student Learning Surveys is included.

GRADE 4 Foundation Skills Assessment (FSA) & Student Learning Survey (SLS) Numeracy Data 2021-22

FSA 4: Numeracy	Participation Rate	Meeting Grade Level Expectations
All Students	80%	68%
Indigenous Students	79%	76%
Students with Diverse Abilities	63%	43%
Student Learning Survey: “I feel I am getting better at math”	Participation Rate	Students who Agree/Strongly Agree
All Students	85 %	87 %
Indigenous Students	90 %	86 %
Students with Diverse Abilities	78 %	95 %

Summary of Key Findings

When comparing the data from the numeracy section of the Foundation Skills Assessment to the student self-reporting data contained in the Student Learning Survey, any gaps in student achievement versus student perception invite further exploration. In other words, do students believe they are getting better at numeracy, and does the student achievement data indicate this? Finally, does the student participation rate reflect a broad enough range of learners to be considered as a reliable measure of all Grade 4 learners?

Participation rates for the grade four Student Learning Survey have improved 14% overall from 2020-21. The grade four FSA, in contrast, improved slightly by 2% over the same period. There was no district numeracy assessment implemented in 2020-2021. Finally, school learning plan conversations and updates continue at school leader meetings.

What is evident:

- An improvement in participation rates is needed for all learners, but especially students with diverse needs at only 63%.
- Indigenous students achieved 8% higher in numeracy compared to all students.
- Students with diverse needs achieved 25% lower in numeracy compared to all of their peers.
- There is a 16% gap between students with diverse needs and all students in their positive perception of “getting better at math.”



Action Items Intermediate (Grades 4–6)

- Support schools in improving participation rates for provincial assessments and surveys for all students to build reliability.
- Implement a K–9 District Numeracy Assessment at the intermediate years.
- Support school teams in developing objectives and strategies to support their school numeracy goal within the context of their School Learning Plan.
- Facilitate end of year transition planning meetings with elementary and middle school teams to support student transitions, particularly focusing on Indigenous learners, learners with diverse abilities, English language learners, and Children in Care.
- Develop an online numeracy resource hub to support all classroom and non-enrolling teachers.

SD8 district and school staff will continue to focus on the numeracy goal of all students in the intermediate years meeting proficiency in numeracy. This will include a renewed emphasis on classroom strategies and resources, a district K–9 numeracy assessment, and tracking of students as they move from grade to grade.

Overview of Middle Years to Secondary Numeracy

Keeping the district numeracy goal of improving numeracy proficiency for all learners in mind, provincial assessment data (FSA, GNA and SLS) indicates some areas for potential focus. First of all, the data indicates that there remain gaps in participation rates. By improving student participation rates on these data instruments the district will be more confident that the results are an accurate indicator that is reflective of all SD8 students.

The Student Learning Survey data indicates that students would like more input into what and how they are learning. SD8 will focus on finding opportunities for school teams to support inclusive and engaging activities and opportunities for students as well as finding ways to support confidence in numeracy concepts.

SD8 data also shows a noticeable trend regarding student academic self-efficacy, the perception that students have of their academic ability. As students progress into the higher grades, their self-efficacy appears to decline, even though they may be trying their best to improve. Furthermore, corresponding Province of B.C. numeracy assessment data also indicates significant achievement gaps for students with diverse needs and students with Indigenous ancestry.

Developing a professional learning series that focuses on classroom assessment for learning strategies within the context of numeracy will further support learners. A district numeracy toolkit for supporting students with diverse needs will be housed on the district numeracy hub, focusing particularly on the middle years.

Finally, ongoing collaboration with Aboriginal Academic Success teachers will continue to focus on embedding Indigenous content and perspectives across the mathematics curriculum and supporting the academic needs of students with Indigenous ancestry. To ensure that all learners improve in their proficiency in numeracy, ongoing collaboration with all education partners, including school staffs, Aboriginal Education staff, and district itinerant staff will occur in developing a 3-year District Numeracy plan. This will include a focus on data analysis and improving participation rates; developing sustainable, collaborative communities of practice focused on numeracy instruction and assessment strategies; and ensuring that non-specialist educators continue to build their confidence in numeracy teaching strategies.

Middle Years Numeracy Program

Numeracy in the middle years focuses on key concepts of:

- Reasoning and analysis
- Understanding and solving
- Communicating and representing
- Connecting and reflecting

Students are expected to use reasoning and logic to explore, analyze and apply mathematical ideas in increasingly conceptual ways while building on the numeracy skills foundation in the intermediate years. They are expected to use multiple strategies to solve problems, to demonstrate mathematical understanding through inquiry problem-solving and place-conscious contexts. Middle years learners are expected to use mathematical language to contribute to discussions, and to explain and justify mathematical ideas and decisions. Finally, they should be able to connect mathematical concepts to each other and other areas of personal interests, to support personal choices, and to incorporate First Peoples worldviews and perspectives.

Reference: [BC Curriculum, Mathematics](#)



Data

The information collected to support student learning in the intermediate and middle years programs with respect to literacy include the following:

- Foundation Skills Assessment, Grade 7
- Student Learning Surveys, Grade 7

Student Learning Survey (SLS) is an annual province-wide census of Grades 4, 7, 10 and 12 students, their parents and staff in public schools. The questions have been developed with input from partner groups, teachers and education experts. The Student Learning Survey is a method of obtaining students’ opinions about their school experience including questions about the curriculum, school atmosphere, and classroom assessment. The following data tables provide information about student academic achievement in reading comprehension and in writing, based on the FSA data. In addition, the tables include Student Learning Survey data reported by students, about their mathematical progress. Participation rates for both the FSA’s and Student Learning Surveys is included.

Reference: [BC Student Learning Survey](#)

GRADE 7 Foundation Skills Assessment (FSA) & Student Learning Survey (SLS) Numeracy and SLS Data 2021-22

FSA 7: Numeracy	Participation Rate	Meeting Grade Level Expectations*
All Students	80%	49%
Indigenous Students	73%	40%
Students with Diverse Abilities	39%	42%
Student Learning Survey 7: “I feel I am getting better at math”	Participation Rate	Students who Agree/ Strongly Agree
All Students	87%	64%
Indigenous Students	88%	56%
Students with Diverse Abilities	77%	56%

*Grade level expectations is the percentage of students “on track” or “extending”

Summary of Key Findings

The Foundation Skills Assessment 7 and Student Learning Surveys are compared in terms of the achievement in numeracy with student perceptions of their self-efficacy. In addition, any gaps in achievement and perception invite further exploration. In other words, are students feeling they are getting better at numeracy and achieving the corresponding results? Finally, are the participation rates satisfactory enough to determine an accurate outcome for decision-making?

Participation rates for the grade seven Student Learning Survey improved 17% overall from 2020–2021, with a slight improvement of 4% for the grade four FSA for the same period. Two of the three scheduled numeracy assessment workshops were held for middle years teachers, and the district K–9 numeracy assessment has not yet been implemented. However, middle years transition meetings are planned for year-end 2023. Finally, district school learning plan conversations at school leader meetings, including numeracy updates, will continue

Nature is written in mathematical language.

— Galileo Galilei, Italian astronomer, physicist and engineer

What is Evident:

- An improvement in FSA participation rates is needed for all learners, but especially for students with diverse needs, with a gap of 40% between all students.
- All students performed below the provincial average of 62%, with less than 50% of students meeting grade 7 level numeracy expectations.
- Students with Indigenous ancestry achieved lower than their peers on the FSA 7 numeracy assessment component by 9%.
- Students with diverse needs achieved significantly lower compared to their peers at 42% proficiency on the FSA 7 numeracy component.
- All students felt they were continuing to improve in mathematics despite the FSA 7 scores falling below 50% according to the Student Learning Survey responses.

Action Items for Middle Years (Grades 7 and 8)

- Support schools in improving participation rates for provincial assessments and surveys for all students through advance scheduling of surveys.
- Support school teams in developing objectives and strategies to support their school numeracy goal within the context of their School Learning Plan.
- Implement a numeracy community of practice through a series of numeracy workshops focusing on Assessment for learning strategies aimed at non-specialist educators.
- Develop an online numeracy resource hub to support all classroom and non-enrolling teachers.
- Support the implementation of a K-9 District Numeracy Assessment at the middle years.
- Facilitate end of year transition planning meetings with elementary and middle school teams to support student transitions, particularly focusing on Indigenous learners, learners with diverse abilities, English language learners, and Children in Care.

SD8 district and school staff will continue to focus on the numeracy goal of all students in the middle years achieving proficiency in numeracy. This will include a renewed emphasis on implementing a district K-9 numeracy assessment at the middle years, offering classroom strategies and resources, tracking of students as they move from grade to grade, and supporting schools in their numeracy goal.

Graduation Numeracy Program (Grades 10–12)

Secondary numeracy encompasses grades 10–12 in the graduation program. At this point, students plan for their graduation requirements using the SD8 3-year Graduation Program Plan for any of the following program pathways depending upon their graduation and post-secondary goals:

- Apprenticeship and Workplace Math
- Foundations of Mathematics
- Pre-Calculus and Calculus

Data

The information collected to support student learning in the graduation program with respect to literacy includes the following:

- Graduation Numeracy Assessment 10
- Student Learning Surveys, Grade 10 and 12

The Grade 10 Numeracy Assessment is a provincial assessment that assesses student proficiency in numeracy. Proficiency is defined as “students being able to demonstrate a complete understanding of the concepts and competencies relevant to the expected learning.” The Grade 10 Numeracy Assessment focuses on the application of mathematical concepts learned across multiple subjects from kindergarten to Grade 10. It requires students to solve problems by using five numeracy processes (different ways of thinking and working): interpret, apply, solve, analyze and communicate.

All students will have an opportunity to write the provincial Graduation Numeracy Assessment 10 before they graduate. The assessment is not based on a particular mathematics course, but is cross-curricular in nature. The assessment is based on a proficiency scale, and not on percentages or letter grades. Students have an opportunity to write the Graduation Numeracy Assessment up to three times to improve their proficiency score on their transcript. The assessment is not used as part of their course mark.

Reference: [BC Graduation Numeracy Assessment 10](#)



*GRADE 10 Graduation Numeracy Assessment and Student Learning Survey (SLS)
Numeracy and Student Learning Survey Data 2020-21*

GNA 10 Numeracy*	Participation Rate	Meeting Grade Level Expectations (Proficient or Extending)
All Students	80%	36%
Indigenous Students	78%	29%
Students with Diverse Abilities	43%	33%
Student Learning Survey 10: "I continue to get better at math"	Participation Rate	Students who Agree/ Strongly Agree
All Students	60%	59%
Indigenous Students	57%	55%
Students with Diverse Abilities	62%	45%

*GNA 10: Indicates grade 10 first time writers only

"Not Available" or masked data means results are not communicated below 10 respondents to ensure the privacy of the respondents

Summary of Key Findings

The Graduation Numeracy Assessment 10 and Student Learning Surveys are compared in terms of the achievement in numeracy with student perceptions of their efficacy. In addition, any gaps in achievement and perception invite further exploration. In other words, are students feeling they are getting better at numeracy and achieving the corresponding results? Finally, are the participation rates satisfactory enough to determine an accurate outcome for decision-making?

Participation rates for the grade ten Student Learning Survey and the Graduation Numeracy Assessment 10 both fell 7% overall from 2020-21. The Graduation Numeracy Assessment 10 credentialling workshop for teachers is deferred until 2023-24.

What is Evident:

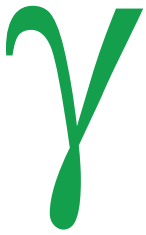
- Students with diverse needs have a lower participation rate for the GNA 10 numeracy assessment; nearly half of all students.
- All students were significantly below proficiency on the GNA 10 numeracy assessment at 36%
- Students with diverse needs fall significantly behind other students in achievement at the proficient level at 33% and in terms of self-efficacy at 45% on the SLS.
- Students who have Indigenous ancestry are behind their peers in numeracy proficiency at 29% and only slightly below in self-efficacy at 55%.
- In grade 10, students overall feel more confident that they are improving in mathematics 59% than the actual achievement results show at a proficiency level 37%.

Action Items for Graduation Program (Grades 10–12)

- Support schools in improving participation rates for provincial assessments and surveys for all students
- Ensure Grade 10 Numeracy Assessment data sets are provided to schools to support School Learning Plan conversations regarding cross-curricular numeracy and improving achievement for all students
- Provide an opportunity for teachers to participate in a Graduation Numeracy Assessment 10 provincial workshop for secondary mathematics educators

SD8 district and school staff will continue to focus on the numeracy goal of all students in the graduation program achieving proficiency in numeracy. This will include data analysis and tracking of students as they move from grade to grade, and supporting schools in their numeracy goal. Finally, bi-annual academic reviews continue to ensure all students are in a position to graduate.





CONCLUSION

Supporting students in achieving strong foundational numeracy skills addresses SD8's commitment to ensuring the success of all learners and improving their life chances as they transition to adulthood and follow their chosen career trajectory.

Numeracy is important in that “a mathematically literate student recognizes the role that mathematics plays in the world in order to make well-founded judgments and decisions needed by constructive, engaged and reflective citizens” in an increasingly complex world (OECD, PISA Mathematics). As well, essential skills in numeracy (and literacy) account for a significant proportion of earnings and income regardless of other factors (Statistics Canada, 2005).

Therefore, it is important that the student expectations of educational success are realized for each learner, including the connection to the strategic plan's goal of numeracy within the context of inclusion and Indigenization.

In addition, a focus on setting goals and developing action plans for continued growth in all areas continues to be emphasized. Studies confirm that effective teachers matter much more than specific curriculum materials, pedagogical approaches, or “proven programs” (Allington & Johnston, 2001; Darling-Hammond, 1999; Duffy, 1997; Pressley et al, 2001; Taylor, Pearson, Clark & Walpole, 2000). In particular, supporting middle years teachers in numeracy assessment and instruction should yield continued improvement in student self-efficacy and achievement.

Therefore, it becomes apparent that by investing in targeted professional learning for teachers will positively impact student learning. In addition, “Ongoing professional learning communities are the bedrock of the work that creates a whole school of effective teachers” (Routman). Through numeracy “Communities of Practice” (Wenger-Traynor), SD8 supports teachers in their professional practice as they in turn support all learners in safe, responsive, equitable, and inclusive learning environments.

Above all, the goal for all learners to achieve proficiency in numeracy will garner them with the confidence and ability to graduate with dignity, purpose, and options.





ADDENDUM

Partnership and Connections

SD8 works collaboratively with many community, regional, and provincial partners including:

- Circle of Indigenous Nations Society (COINS)
- College of the Rockies
- Columbia Basin Alliance for Literacy (CBAL)
- Columbia Basin Environmental Educators Network (CBEEN)
- Creston Valley Youth Network
- Early Years tables: Slocan Valley, Salmo, Creston, Nelson, Kaslo
- East Kootenay Teacher Education Program (UVic)
- East Kootenay Child Care Resource and Referral (CCRR)
- Interior Health (IHA)
- Junior Achievement BC
- Kootenay Association for Science and Technology (KAST)
- Kootenay Kids Society
- Ktunaxa Kinbasket Child and Family Services Society
- Ministry of Children and Family Development
- Nelson & District Youth Centre
- North Kootenay Lake Community Services Society
- Selkirk College
- West Kootenay Child Care Resource and Referral (CCRR)
- West Kootenay Teacher Education Program (UBC)

Glossary of Acronyms

Academic Self-Concept: Within the Student Learning Survey, the EDI and the MDI, there are questions reflecting the theme of “Academic Self-Concept.” Academic Self-Concept relates to how well an individual feels they can successfully learn at school. The questions regarding Academic Self-Concept relate to the individual’s sense of well-being, and having a positive Academic Self-Concept facilitates positive behaviours and perspectives.

EDI: The Early Development Instrument (EDI) is a questionnaire that gathers data used to measure population-level patterns and trends in children’s developmental health. The questionnaire is completed by teachers for their Kindergarten students and includes 103 questions organized into five scales measuring core areas of child development: Physical Health and Well-being, Social Competence, Emotional Maturity, Language & Cognitive Development and Communication Skills and General Knowledge. Within the boundaries of SD8, the information is further delineated within 3 neighbourhood groups: Creston, Nelson and Kootenay Lake Rural. <http://earlylearning.ubc.ca/edi/>

Foundation Skills Assessment (FSA) is an annual province-wide assessment of all B.C. students’ academic skills in grades 4 and 7, and provides parents, teachers, schools, school districts and the Ministry of Education with valuable information on how well students are progressing in the foundation skills of Literacy and Numeracy.

Graduation Numeracy Assessment 10 (GNA10): The GNA10 focuses on the application of mathematical concepts learned across multiple subjects from kindergarten to Grade 10. It requires students to solve problems by using five numeracy processes (different ways of thinking and working): interpret, apply, solve, analyze and communicate. All students will have an opportunity to write the provincial Graduation Numeracy Assessment 10 before they graduate. The assessment is not based on a particular mathematics course, but is cross-curricular in nature. The assessment is based on a proficiency scale, and not on percentages or letter grades. Students have an opportunity to write the Graduation Numeracy Assessment up to three times to improve their proficiency score on their transcript. The assessment is not used as part of their course mark.

MDI: The Middle Years Development Instrument (MDI) is a self-report questionnaire that asks adolescents in grade 4 and grade 7 about their thoughts, feelings and experiences in school and in the community. It assesses five areas of development: Social and Emotional Development, Physical Health and Well-Being, Connectedness, Use of After-School time and School Experiences. Within the boundaries of SD8, the information is further delineated within 3 neighbourhood groups: Creston, Nelson and Kootenay Lake Rural. <http://earlylearning.ubc.ca/mdi/mdi-questionnaires/>

Student Learning Survey (SLS): The Student Satisfaction Survey was administered from 2001 to 2015 and was redesigned and renamed the Student Learning Survey in 2016. Depending on the grade, there are 63 to 81 questions asked within the factors of Education Modernization, Improving Student Learning Framework, Learning Environment, Wellness and Satisfaction. School-based information is shared with school and district leaders for consideration when planning.

Works Cited

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