Infusing a First Nations, Métis and Inuit Perspective when Delivering Math Outcomes

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Red Deer Public Schools has approximately 900 First Nations, Métis and Inuit students. It is important

that these students see themselves reflected positively in the classroom and in the curriculum. Some teachers do this by emphasizing Indigenous culture as it comes up in their curriculum delivery; some have bulletin board displays; and some encourage students to connect to their culture and share with their peers as much as they can when they engage in classroom research.

Having students see themselves in many parts of the curriculum is a way to boost their engagement and build a sense of belonging. This can instill a sense of pride in Indigenous students, encourage more dialogue and serve as a catalyst for

teachable moments for the rest of the class.

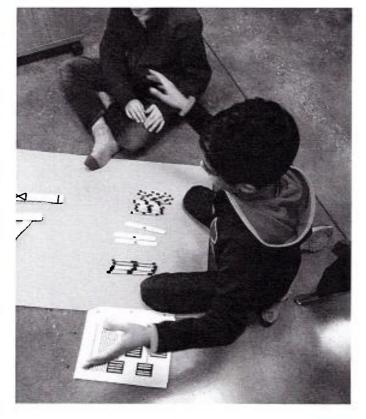
The model used in First Nations, Métis and Inuit Learning Services at Red Deer Public Schools takes several approaches. The goal is to provide curriculum service delivery and support to cover as many grades as possible, making as many connections as possible. It is a work in progress. Collaboration with teachers and administrators is essential. School personnel can approach First Nations, Métis and Inuit Learning Services with a question, a possible connection that they see or an opportunity for infusion. When an idea is brought forward by a district teacher, it is developed, refined

and delivered to students. Then it is kept in a cache to be shared with others who might be interested. In the other approach, First Nations, Métis and Inuit Learning Services staff create curriculum connections. focusing on areas where infusion is possible, and then approach teachers and ask them to pilot the ideas.

The ideas for infusion are diverse and far-reaching. When a math outcome or concept is being taught, it often fits into other subject areas. Making cross-curricular connections is an excellent way to teach math, social studies, art, physical education and

English language arts—all at the same time. It is also an excellent way to implement technology outcomes.

A great advantage to using Indigenous games in the classroom to teach math outcomes is that it usually involves movement. Students appreciate activity and movement whenever possible in the





classroom, and they can explore concepts through being active. This is an excellent method for keeping kinesthetic learners engaged longer. Students participate in the movement activity that leads to the learning and then reinforce their learning through paperwork, technology or class discussion. Through playing various games, students can gather data through physical activities. No textbook required! The teacher can then centre a lesson on the information gathered. For example, Google Sheets can be used to sort, analyze, organize and visualize the data. One- and two-step word problems can be created. *Mode, median, mean* and

range can be understood. Measurement, time, greater than and less than, and base 10 blocks can all be covered. The list is endless when it comes to classroom application.

Teaching Indigenous games has a strong connection to the district's numeracy goal. However, it also capitalizes on an opportunity to expand the requirement of applying foundational knowledge about First Nations, Métis and Inuit in Alberta's revised Teaching Quality Standard (TQS). This foundational knowledge and the revised TQS are on the horizon for teachers in September 2019.

Using Indigenous games is a practical way to broaden the classroom experiences of both the teacher and the students when teaching math outcomes.

Terry Lakey is currently working with First Nations, Métis and Inuit Learning Services in Red Deer Public Schools. Prior to joining Red Deer Public Schools, in 1997, he taught with Northlands School Division. Since joining Red Deer Public Schools, he has taken on several roles. As well as being a classroom teacher for years, Terry has been involved with the development of First Nations, Métis and Inuit curriculum resources for many years. He uses the resources for his own classroom and enjoys sharing his ideas with others. He has a passion for making classroom learning engaging and hands on, and for accommodating a wide variety of learning styles.