

Numeracy is the ability, confidence and willingness to engage with quantities or spatial information to make informed decisions in all aspects of daily living. (Alberta Education)

This learning guide is designed for use by professional learning communities, learning coaches and teacher-leaders, or as a self-paced study to enhance and support teacher practice in the area of numeracy.



This conversation guide is intended to be used after viewing the video clips for [Numeracy Uncovered](#).

In this keynote presentation to Edmonton Public Schools' staff, Ulana Soletsky, Numeracy Coordinator for Greater St. Albert Catholic Schools and the Edmonton Regional Learning Consortium, presents on numeracy, its history, definition, uses and implications, and strategies for implementation.

Key understandings:

- Early numeracy is a better predictor of school success than early literacy.
- Numeracy, like writing, must permeate the curriculum.
- Numeracy and math are not the same but they are interrelated. All numeracy is underpinned by some mathematics.
- We need to be aware of numeracy in all subject areas to help our students draw connections.

Questions for discussion:

[Part 1- Introduction to Numeracy](#)

- What is numeracy? What it is not?

[Part 2- Key Components of Numeracy and Consequences of Innumeracy](#)

- Where do we use numeracy in our daily lives?
- What is the danger of being innumerate?
- What key actions and habits of mind are associated with being numerate (e.g., estimating, problem solving, considering context)?
- How can you create a growth/mathematical mindset in your students and teachers?

- What strategies can you identify for changing student, teacher and parent negative perceptions about math, for example that it is socially acceptable to be bad at math?

[Part 3- Implications for Schools and Teachers](#)

- Where does numeracy appear in student learning outcomes across the curriculum?
- How can you use numeracy to enhance learning outcomes in your subject area?
- What shifts can you make in your teaching practice throughout the day and across curriculum areas that will lead to the development of numeracy skills in your students?
- What numeracy resources can support you and your staff in learning more about numeracy?
- How can you increase staff understanding and confidence and draw attention to numeracy across the content areas?
- What professional learning support could be offered?

For more information:

- [Literacy and Numeracy Programming](#)
- [Exploring Numeracy through Traditional Games](#)
- [Engaging all Students through Numeracy](#)
- [Alberta Education, "What is Numeracy?"](#)
- [Carol Dweck, "Developing a Growth Mindset"](#)

Acknowledgement:

This guide, in partnership with Edmonton Public Schools, was developed by the Edmonton Regional Learning Consortium through a grant from Alberta Education to support implementation. It is provided for free in support of improved teaching and learning

under the following Creative Commons license.

