



"Technology enables students to explore and create patterns, examine relationships, test conjectures and solve problems." (pg. 9)

"Technology should be used as one of a variety of approaches and tools for creating mathematical understanding." (pg. 9)

(The Alberta 10-12 Mathematics Programs of Study with Achievement Indicators 2008, Alberta Education)

Seven Mathematical Processes

- Communication
- Connections
- Mental Mathematics and Estimation
- Problem Solving
- Reasoning
- **Technology**
- Visualization

Thoughts on Technology

Technology assists in exploring patterns and viewing multiple representations. The following are examples where technology may be used to enhance learning. Using technology in math is more than a graphing calculator. Being a critical consumer of technology to ensure that student engagement and learning occurs.



M20-2 Angles in Polygons

- [Interior Angle Interactive Animation](#)
- [Exterior Angle Interactive Animation](#)

Distance-Time Gizmo from LearnAlberta.ca (*Search within Learn Alberta for Distance-Time Gizmo*)

Use this with two runners to discuss the number of solutions to a system of linear equations

For more information and additional supports for implementation, visit <http://erlc.ca/resources/filter.php?theme=11&title=Mathematics>



Chart of Useful Technologies

Title	Downloads / Links	Description
xMind	www.xmind.net	A free, easy to use mind mapping program.
Prezi	www.prezi.com	A free (for educators) zooming presentation program.
YouTube	www.youtube.com	YouTube contains many educational videos. Have students upload their own video creations to your own YouTube channel.
Geogebra	www.geogebra.org	A free dynamic math software program. Visit Glen Reesor's site for some excellent Geogebra Creations!
Graph Sketch	www.graphsketch.com	A simple easy to use online graph sketching program.
Learn Alberta	www.learnalberta.ca	A website with many interactive learning programs for students & teachers.
Graph	Download Graph	A graphing program with many features.
Wolfram Alpha	www.wolframalpha.com	A powerful computational knowledge engine.
Desmos Graphing Calculator	www.desmos.com	An online graphing calculator with built in sliders; graph inequalities, trig functions in radians and degrees, relations in any forms, tables, etc.
Tarsia	tarsia	A program that allows you to build matching puzzles (dominoes, triominoes, etc.). Equation editor is built in to the program. (free download – must be downloaded to be used. Click here to access over 600 ready to use puzzles.
NLVM	http://nlvm.usu.edu/	National Library of Virtual Manipulatives