

Outcome Correlation: Mathematics Research Project Mathematics 20-2

ASSESSMENT AND EVALUATION OF STUDENT LEARNING

This performance task is designed to gather assessment evidence for the following learner outcomes (shown in Times New Roman font) from the Alberta Mathematics Program of Studies (2008).

Learner Outcomes		Criteria for Evaluation *
General Outcome – Mathematics Research Project Develop an appreciation of the role of mathematics in society.		Students provide evidence of their learning as they:
Strand	Specific Outcomes	
Mathematics Research Project	1. Research and give a presentation on a historical event or an area of interest that involves mathematics. [C, CN, ME, PS, R, T, V] [ICT: C1-4.2, C1-4.4, C2-4.1, C3-4.2, C7-4.2, F2-4.7]	<ul style="list-style-type: none"> • collect primary or secondary data related to the topic • interpret the data • present multiple sides of the issue with supporting data • organize and present the research project

* Criteria statements appear again in the first column of the evaluation tools (checklists, rating scales and/or rubrics) and are the basis on which student evaluation is made relative to the learner outcomes.

Mathematical processes are skills that are addressed at all grade levels. They are not taught as discrete skills, but are integrated into the specific outcomes. Links to the processes identified in the Program of Studies are indicated within square brackets after the specific outcomes.

Throughout this task, the following mathematical processes are specifically addressed:

- Communication: communicate in order to clarify, reinforce and modify ideas.
- Connections: connect mathematical ideas to each other or to the real world.
- Mental Mathematics and Estimation: estimate and determine reasonableness of calculated values.
- Problem Solving: develop and apply new mathematical knowledge through problem solving.
- Reasoning: explore, analyze, generalize and conclude.
- Visualization: create, interpret and describe a visual representation.