

Appendix E

Another useful evaluation tool that was used was the rubric below, taken from Improving Student Learning Through Mathematical Literacy - Problem Solving (Grand Erie District School Board, 2002)

Name: _____				
RUBRIC FOR PROBLEM SOLVING				
Understand the problem	<input type="checkbox"/> Requires significant teacher assistance to understand problem	<input type="checkbox"/> Identifies some of the required information with occasional teacher assistance	<input type="checkbox"/> Independently understands the problem, identifying some irrelevant information.	<input type="checkbox"/> Reduces the problem to relevant information. <input type="checkbox"/> Independently connects problem to previous knowledge and experiences.
Make a plan	<input type="checkbox"/> Requires teacher assistance to choose a strategy to address the problem	<input type="checkbox"/> Considers a single strategy to address the problem.	<input type="checkbox"/> Considers more than one strategy to address the problem.	<input type="checkbox"/> Considers multiple or blended strategies to address the problem
Carry out the plan	<input type="checkbox"/> Requires significant assistance to apply any strategy to the problem	<input type="checkbox"/> Applies the chosen strategy to arrive at a partial solution	<input type="checkbox"/> Applies the chosen strategies to solve the problem	<input type="checkbox"/> Solves the problem applying the chosen strategies and revising the plan as necessary
Look back	<input type="checkbox"/> Can determine the appropriateness of the strategy or the reasonableness of the solution only with much assistance	<input type="checkbox"/> Considers the appropriateness of the strategy or the reasonableness of the solution with teacher encouragement	<input type="checkbox"/> Independently considers the appropriateness of the strategy and the reasonableness of the solution	<input type="checkbox"/> Independently demonstrates the appropriateness of the strategy and the reasonableness of the solution
Communicate	<input type="checkbox"/> Explains the process partially and unclearly. <input type="checkbox"/> Uses few or inaccurate mathematical terms, notations and representations (charts, tables, graphs and diagrams)	<input type="checkbox"/> Explains the process partially or unclearly. <input type="checkbox"/> Uses some mathematical terms, notations and representations (charts, tables, graphs and diagrams)	<input type="checkbox"/> Explains the process clearly and completely. <input type="checkbox"/> Uses appropriate mathematical terms, notations and representations (charts, tables, graphs and diagrams)	<input type="checkbox"/> Explains the process clearly and completely. <input type="checkbox"/> Provides justification for choices appropriate to the grade level. <input type="checkbox"/> Uses appropriate mathematical terms and notation and representations