Matching the Common Core State Standards for Mathematics (CCSSM) to Canadian mathematics curricula

Just as the Canadian mathematics curricula are separated into process/competencies and content expectations, content outcomes, and Essential Knowledges, the CCSSM is separated into Standards for Mathematical Practice and Standards for Mathematical Content.

The charts and information below will help the Canadian user connect his or her own curriculum with the CCSSM.

NCTM Standard	CCSSM Content Standard	Canadian mathematics curricula		
		Ontario curriculum	**Quebec curriculum**	**WNCP-based curricula**
Problem solving	SMP1. Make sense of problems and persevere in solving them.	Problem solving	Solves a situational problem	Problem solving
Reasoning and Proof	SMP2. Reason abstractly and quantitatively. SMP3. Construct viable arguments and critique the reasoning of others.	Reasoning and proving	Uses mathematical reasoning	Reasoning
Communication	SMP6. Attend to precision.	Communicating Reflecting	Communicates by using mathematical language	Communication
Connections	SMP7. Look for and make use of structure. SMP8. Look for and express regularity in repeated reasoning.	Connecting		Connections
Representation	SMP4. Model with mathematics. SMP5. Use appropriate tools strategically.	Representing Selecting tools and computational strategies		Visualization Mental math and estimation Technology

Additional comments on the Ontario curriculum

The *reflecting* process is listed as matching communication since it generally involves either out-loud or inside-one's-own-head communication. But reflecting often also connects to reasoning and proof; frequently, students reflect on the reasonableness of their results, an aspect of reasoning.

The *connecting* process is matched with looking for structure and regularity since mathematical connections are often made that way.

The *selecting tools and strategies* process is matched with use of appropriate tools and representation, where it naturally fits, but there is often reasoning involved in making tool choices.

Additional comments on the Québec curriculum

The NCTM connections and representation process, and the matching Common Core State Standards for Mathematics have no direct match to the three Québec processes. However, representation will be used by students as they solve problems, and connections will be made as students relate real-life situations to mathematics.

Additional comments on the WNCP curriculum

Although the process of *mental math and estimation* is listed under representation, where it naturally fits, there is certainly an aspect of connections and an aspect of reasoning involved in using mental math and estimation.