

Highlights of Differences Between the Common Core State Standards for Mathematics and Canadian Mathematics Curricula

Elementary Level/Middle Level

Number:

- Whole number operations are taught in a more condensed fashion in the CCSSM than in Canadian mathematics curricula. There is also a much greater focus on standard algorithms in the CCSSM than in Canada.
- Fraction operations work appears much earlier in the CCSSM than in Canadian mathematics curricula.

Pattern:

- There is no work with repeating patterns in the CCSSM.
- Pattern work in the CCSSM is more focused on applying pattern rules to extend and then compare patterns than on describing, translating, and creating patterns.
- Pattern work in many Canadian jurisdictions is spread through the grades rather than being concentrated in one or two grades.
- There is less focus in Grades K–8 on determining pattern rules or general terms of patterns in the CCSSM than in many Canadian jurisdictions.

Measurement:

- Not surprising, work with Imperial measurement units is more visible in the CCSSM than in Canadian curricula, and fewer metric units seem to be required in the CCSSM than in Canada.
- There is less work on measurement of time, capacity, mass, temperature, and surface area of 3-D objects in the CCSSM than in Canadian mathematics curricula.

Geometry:

- Work on geometric transformations is spread through the grades in Canada rather than being concentrated in one grade.

- Geometry work is organized quite differently in Canadian mathematics curricula than in the CCSSM. Although there are topics in common, many topics dealt within Canadian curricula are not presented in the CCSSM. Where there are common topics, grade levels differ quite a bit between the Canadian mathematics curricula and the CCSSM.

Data:

- There is less work with data collection, description, organization, and exploration of different types of graphs (e.g., concrete, circle, broken line) in the CCSSM than in Canadian mathematics curricula.
- Work on probability is spread through the grades in Canada rather than being concentrated in one grade.

Secondary Level:

- The organization of the CCSSM is not in courses, leaving it to other jurisdictions to determine that organization. The Canadian mathematics curricula are organized in courses.
- In some parts of Canada, there are many secondary course styles, (e.g., workplace courses vs. academic courses) but this is not apparent in the CCSSM.
- No work on financial math (e.g., personal budgeting, annuities, etc.) is explicitly mentioned in the CCSSM, but is required in some Canadian courses.
- There is no work on linear programming in the CCSSM, but this is required in Québec.
- There is no work on “logical reasoning” as a topic in the CCSSM, but this is required in some WNCP courses.
- Work on matrices, which is suggested in the CCSSM, is missing in most Canadian mathematics curricula.

