



Computational thinking teaches students how to engage with our world

Computational thinking teaches students to apply strategies that computers use to solve real-world problems. The seven computational thinking strategies equip students with valuable problem-solving skills such as finding patterns between events and making meaning from data. As a social studies educator, you know that these skills are core competencies. These engaging and fun standards-aligned resources give you the tools to integrate computational thinking into your social studies classroom.

Computational thinking strategies:

Collecting data—how to find the right information

[Interactive Population Map by Census Mapper](#)

Whether it's in the form of surveys, interviews or government records, data helps us tell a story. The Canada Census of 2016 provides data about Canadian society via an interactive map. Students use the map to locate and compare various types of information. Student can use this resource to collect data about their own location or a larger area, and produce a secondary source document.

Analyze data—interpret data to find relationships and predict outcomes

[Significant Events in Canadian History](#)

The *Canadian Encyclopedia* has links focused on specific time periods in history. Students can create timelines or cause-effect charts in order to analyze social structures, technologies, and significant events. For more models of historical timelines and analysis of cause and effect of historical events, search the various timelines that have been curated on different themes.

Decompose—solve a complicated problem by breaking it into smaller pieces

[The Canadian Encyclopedia](#)

Dividing history into smaller parts or subtopics makes it more accessible to students. The Canadian Encyclopedia showcases a wide range of subjects, themes, and people including multiculturalism, women's history, Indigenous history, war, religion, government, and others. Guide students through a selection of primary and secondary sources and discuss how each informs their understanding of the period and Canadian history as a whole. Have students decompose your current topic of study into smaller parts, and have each research and present history through that lens.

Find Patterns—identify themes and connections

[Library and Archives Canada](#)

Identifying patterns helps students make sense of society, government, and history. As the custodian of our distant past and recent history, Library and Archives Canada (LAC) is a key resource for all Canadians who wish to gain a better understanding of who they are, individually and collectively. LAC acquires, processes, preserves and provides access to our documentary heritage and serves as the continuing memory of the Government of Canada and its institutions. Students can identify patterns in the data within Canada and its interaction with other nations and groups and use these patterns to make predictions or to support opinions about event causes or government policies.



Find more easy-to-implement resources to integrate computational thinking practices into your classroom by visiting ignitemyfutureinschool.ca

Abstract—remove details to see the big picture

[Canada's System of Government](#)

Reducing complexity helps students understand complicated topics like the Canadian government's systems of checks and balances more clearly. Students can research the three branches of government and reduce detail from their findings to explore how checks and balances work in the Canadian government and compare that to the government of another nation. Extend learning on the topic by engaging students in debate about the balance of power in government throughout history or other potential applications of checks and balances.

Build models—test, experiment and simulate

[Maps of Canada](#)

Students can engage with history and understand how perspective shapes our understanding by creating maps. The Library and Archives Canada resource "Types of Maps" includes a wide array of historical maps that shaped our view of the nation of Canada. Students can build their own map by sketching, building a physical scale model, or utilizing computer software.

Develop algorithms—create thorough step-by-step instructions

[Canadian Confederation Documents](#)

The *Virtual Museum of Canada* provides an algorithm for the rules of government of Canada. Guide students through the primary source documents and discuss the purposes of the various rules and procedures. Engage them in creating a document for their own government by creating an algorithm, or set of instructions and parameters.