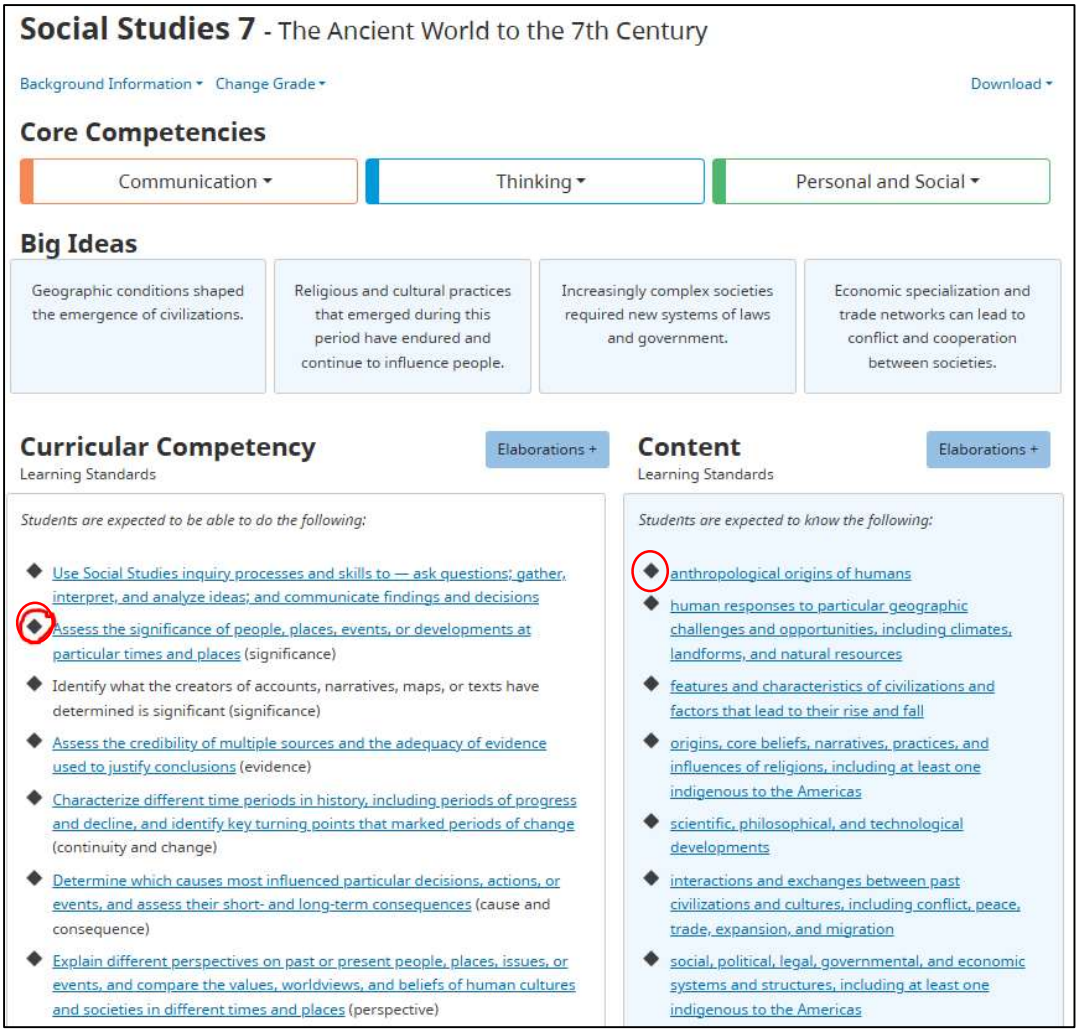
Student-Engaged Instruction & Assessment using "The Big Three"

The Big Three

1. What am I learning?
2. How is it going?
3. Where am I going next?

STEP 1 Make a Learning Standard from one Curricular Competency and one Content Standard.



Social Studies 7 - The Ancient World to the 7th Century

Background Information ▾ Change Grade ▾ Download ▾

Core Competencies

Communication ▾ | Thinking ▾ | Personal and Social ▾

Big Ideas

Geographic conditions shaped the emergence of civilizations.	Religious and cultural practices that emerged during this period have endured and continue to influence people.	Increasingly complex societies required new systems of laws and government.	Economic specialization and trade networks can lead to conflict and cooperation between societies.

Curricular Competency
Learning Standards — Elaborations +

Students are expected to be able to do the following:

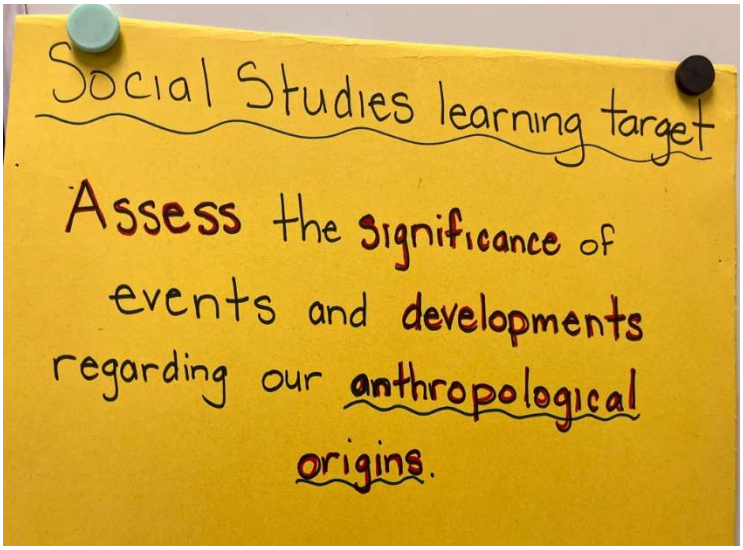
- Use Social Studies inquiry processes and skills to — ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions
- Assess the significance of people, places, events, or developments at particular times and places (significance)
- Identify what the creators of accounts, narratives, maps, or texts have determined is significant (significance)
- Assess the credibility of multiple sources and the adequacy of evidence used to justify conclusions (evidence)
- Characterize different time periods in history, including periods of progress and decline, and identify key turning points that marked periods of change (continuity and change)
- Determine which causes most influenced particular decisions, actions, or events, and assess their short- and long-term consequences (cause and consequence)
- Explain different perspectives on past or present people, places, issues, or events, and compare the values, worldviews, and beliefs of human cultures and societies in different times and places (perspective)

Content
Learning Standards — Elaborations +

Students are expected to know the following:

- anthropological origins of humans
- human responses to particular geographic challenges and opportunities, including climates, landforms, and natural resources
- features and characteristics of civilizations and factors that lead to their rise and fall
- origins, core beliefs, narratives, practices, and influences of religions, including at least one indigenous to the Americas
- scientific, philosophical, and technological developments
- interactions and exchanges between past civilizations and cultures, including conflict, peace, trade, expansion, and migration
- social, political, legal, governmental, and economic systems and structures, including at least one indigenous to the Americas

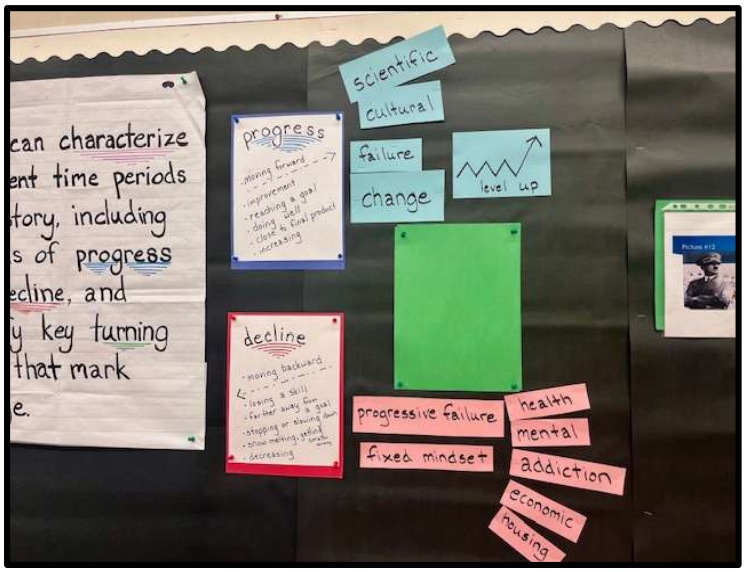
STEP 2 Display it on the board for the duration of the unit.



STEP 3 Have Students "Unpack" the Curricular Competency without the content standard first.

- Define it!
  Students define and give examples of key terms in pairs: assess, significance, developments.
- Personalize it!
  Students practice assessing the significance of events in their own lives. Pipe cleaner activities, timelines, artifacts are all great tools.
- Capture & Keep it!
  Student definitions, analogies, examples, and personal connections can be displayed on a "Concept Map" on the wall, which can be added to over the course of the unit.

Concept Map for Social Studies 8 Unit →



Learning Targets
Long-term learning standard goals can be broken down into a sequence of smaller goals, called **learning targets,** that are written in kid-friendly language, and make the process of daily learning visible to students and teachers.

- Identify the skills (verbs in context) and concepts (nouns, content).
- List the vocabulary, background knowledge, thinking skills, and large concepts (like the Scientific Method or Pythagorean Theorem) that aren't explicitly stated in the standard but must be known to achieve the standard.
- Put all those pieces into a **learning progression**. The learning progression for a whole unit may involve 3 – 5 key parts that become mini-units or multi-day lessons, or it may involve 10 smaller goals – each one a single lesson that accumulates until it comprises the knowledge and skill of the whole learning standard.
- For each part in the learning progression, create a **learning target** - a clear, "I can" goal that is small, concrete, and measurable. Learning targets "walk" students towards success in the larger standard.

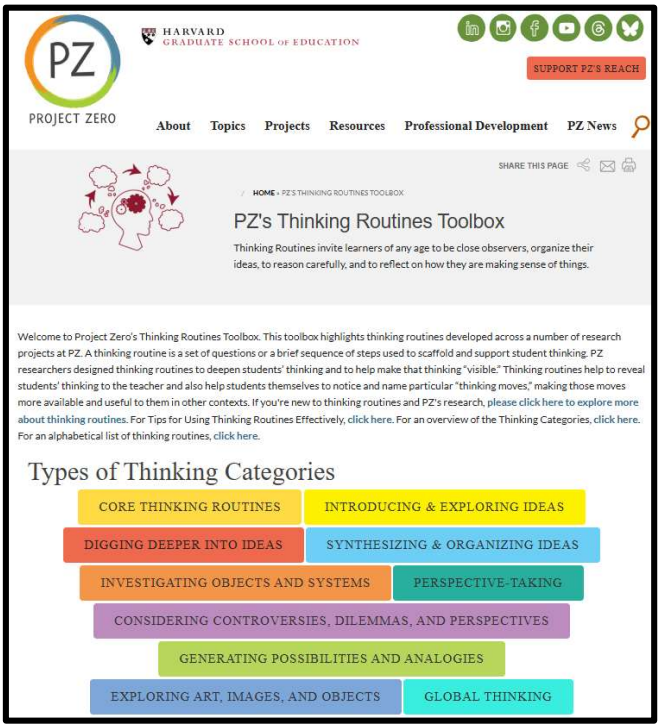
STEP 4 Invite students to apply the skill in the standard, without content.

For example, students might "assess the significance" of Covid in their own lives, or of several important events in their lives.

Students working on "using logic and patterns" might be asked to make sense of a photo showing a contradictory or impossible event.

STEP 5 Bring in Content

Have students watch, read, or listen with a purpose. Purpose creates attention, focus, and curiosity. Project Zero's Thinking Routine Toolbox provides ready-made activities for an array of thinking "moves" that comprise our learning standards and help students process information. Some of the thinking moves activated by Project Zero lessons are synthesizing, perspective-taking, inquiry, and investigating – types of thinking applied across BC subject area curriculum.



Step 6 Invite Student Reflection

Keep it curricular! Create reflection questions and prompts using language from subject-area curriculum and/or Core Competency Profiles and Facets.
Students can reflect on:

- Progress with the **learning standard**.
- A **Core Competency** that aligns with the learning standard.
- A **Core Competency** needed for students to engage successfully in a subject-area learning experience or activity.
- A **Core Competency** related to one's approach to learning – one's beliefs, attitudes, or behaviours.
- Ideally, students regularly reflect and assess on learning standards AND related Core Competencies.

Critical Thinking Core Competency – Reflecting and Assessing

"Students apply critical, metacognitive, and reflective thinking in given situations, and relate this thinking to other experiences, using this process to identify ways to improve or adapt their approach to learning. They reflect on and assess their experiences, thinking, learning processes, work, and progress in relation to their purposes. Students give, receive, and act on feedback and set goals individually and collaboratively. They determine the extent to which they have met their goals and can set new ones."

Metacognition *is the ability to plan, monitor, and assess one's learning process, and make changes to learning behaviours. To support the growth of student metacognition and reflection, teachers can ask questions and create opportunities for students to become aware of these cognitive and behavioural processes.*

Sample Exit Tickets Prompting Metacognitive Reflection

Name: _____

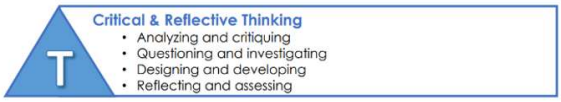
Exit Ticket

Assess the significance of an event, person, or place in your own community.

Reflect on your progress in understanding how to assess significance. Retrace you thoughts during each activity in the class. What did you learn in each?

Name: _____

Exit Ticket



What have you learned about assessing significance? What do you consider for something to be significant? What are your criteria for significance?

Name:_____

Exit Ticket

A student who can "assess significance" is able to do the following:

- Consider different perspectives,
- pinpoint evidence,
- use explicit or implicit criteria,
- make defensible judgments or assessments.

If you were going to assess your peer, what questions would you ask them to get evidence of their proficiency in each of the 4 skills above?

Name:_____

Exit Ticket

Assess your progress with assessing significance. What strategies are helping you grow? What attitudes and behaviours might be hindering you?

Other Prompts for Metacognitive Reflection on Curricular Learning

1. Monitoring comprehension is critical to learning and strengthening comprehension.
   - How do you know that you understand something?
   - How do you know when you don't understand something?
   - What strategies do you use to monitor comprehension?

2. During this class, use one of the comprehension monitoring strategies suggested by students in our class and:
   - Briefly describe your plan to use the strategy. Address what you'll do and when.
   - Did it work? Did the strategy help you see where and when you get confused or stop understanding?
   - Talk about where your comprehension breaks down. Do you notice any patterns?
   - What strategies did you use to get "unstuck". We will share these as a class.

3. Students can monitor their ability to do all kinds of things; comprehension is just one. Similar questions could be posed about monitoring feelings, attitudes, behavior, or the development of skills in written and oral communication, fundamental movements, and following safety protocols in the kitchen, lab, gym, or shop.

4. How easy is reflective thinking for you, on a scale of 1-5, 5 being very difficult? Explain.

5. Attitudes, "hidden" beliefs, mood, and behavior can help or hinder learning. Openminded, flexible thinking, growth mindset, optimism, awareness of goals, a belief that the learning is relevant, and other characteristics help students find success.
   - What attitudes, beliefs, moods, and behaviours do you have that help you in learning and being a student?
   - What ones hinder you? How? Choose one of these to work on and outline a plan for how?
   - What might you need to know? How can you find out?

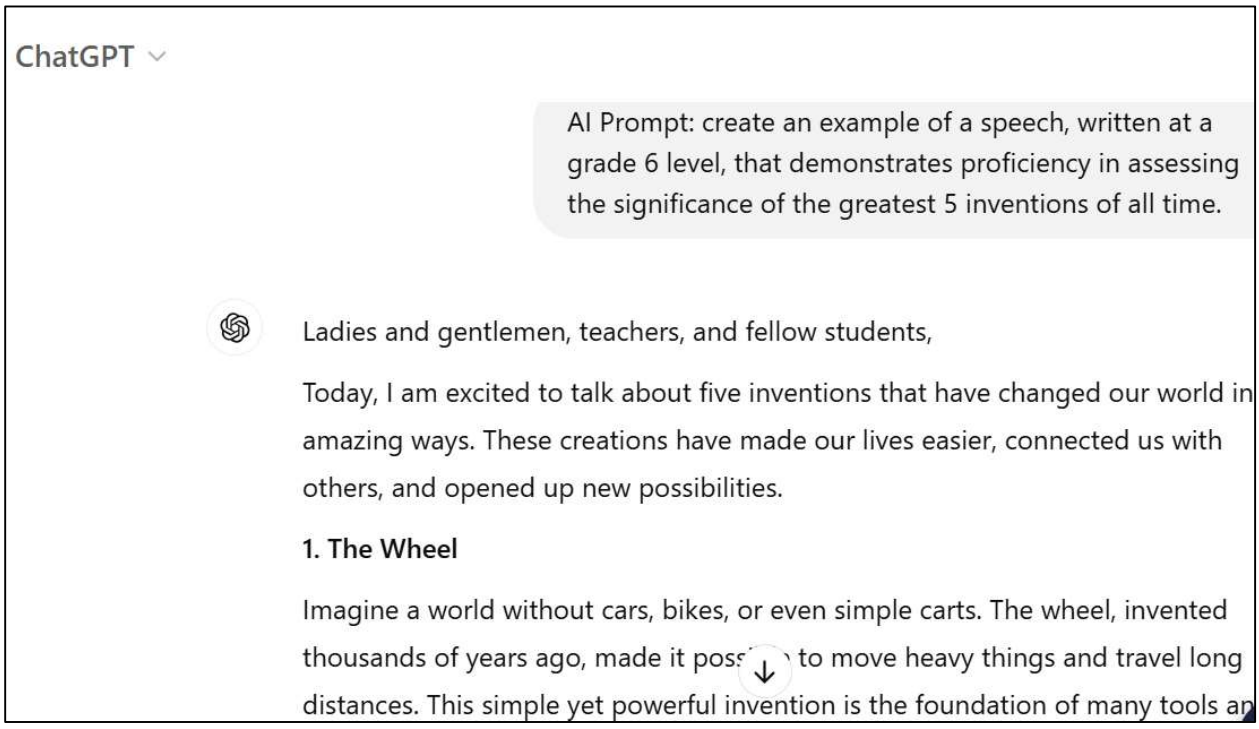
6. A. What in-class behaviours help you focus and persevere in reflective thinking? What outside-class behaviours or routines also help?

B. What behaviours hinder you in and out of class?

C. Why do you think you engage in these behaviours? What do they help you cope with? What needs are not being met? Do you know of any healthier coping strategies? Do you need help learning about these?

STEP 7 Use Exemplars to Co-create Criteria for Success.

AI is a great tool for creating grade-level exemplars for different tasks students might choose to show their understanding of the standard.



To co-create criteria, ask students:

- Is this work "good"? Explain, giving reasons that refer to the work.
- How well does this show the author's ability to assess the significance of the greatest inventions?
- Explain your answer: first, identify with a highlighter all the parts where the author shows an understanding of concepts and the ability to assess significance. Refer to these in your explanation.

STEP 8 Co-create a task-neutral rubric for the competency part of the learning standard.

*The standard is written at the proficient level. That means that a student who becomes proficient has learned to do the exact thing described by the standard at the cognitive complexity of the verb (in context) in the standard. Students cannot be evaluated in the standard before they have engaged in learning at that level.

Emerging`	Developing	Proficient	Extending
I can recall or list some events. I know they are important and am working towards explaining why. I can say what is the most significant development and am working to compare and contrast it with others.	I can create a basic summary of main events and developments and explain the main impact of each. I can compare and contrast each development and argue which one is most significant and why.	I can compare and contrast the impacts of important events and developments. I can make an inference about which is most significant and explain my reasons with evidence and examples. I can make logical guesses about the experiences of those involved and infer what might have been or is still significant to each.	I can explain the significance of formative events, addressing how these worked together to produce an effect. I can elaborate insightfully on nuances of events or affects. I can identify diverse perspectives of the same topic and explain differences in opinion about what is significant. I address events and impacts of events not covered in class and make inferences about their affects and their significance.

Bloom's Taxonomy and **Webb's Depth of Knowledge** are useful tools for creating rubrics and learning experiences with rigor or high cognitive complexity.

Bloom's six major categories were changed from noun to verb forms in the new version which was developed in the 1990's and released in 2001. The knowledge level was renamed as remembering. Comprehension was retitled understanding, and synthesis was renamed as creating. In addition, the top two levels of Bloom's changed position in the revised version.

Bloom's Taxonomy	Revised Bloom's Taxonomy
Knowledge	**Remembering**
Recall appropriate information.	
Comprehension	**Understanding**
Grasp the meaning of material.	
Application	**Applying**
Use learned material in new and concrete situations.	
Analysis	**Analyzing**
Break down material into component parts so that its organizational structure may be understood.	
Synthesis	**Evaluating**
Put parts together to form a new whole.	*Make judgments based on criteria and standards.*
Evaluation	**Creating** *(Previously Synthesis)*
Judge value of material for a given purpose.	*Put elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.*

Norman L. Webb of Wisconsin Center for Educational Research generated DOK levels to aid in alignment analysis of curriculum, objectives, standards, and assessments.

Webb's Depth of Knowledge & Corresponding Verbs

**Some verbs could be classified at different levels depending on application.*

Recall and Reproduction *Correlates to Bloom's 2 Lowest Levels*

Recall a fact, information, or procedure.

arrange, calculate, define, draw, identify, list, label, illustrate, match, measure, memorize, quote, recognize, repeat, recall, recite, state, tabulate, use, tell who- what- when- where- why

Skill/Concept

Engages mental process beyond habitual response using information or conceptual knowledge. Requires two or more steps.

apply, categorize, determine cause and effect, classify, collect and display, compare, distinguish, estimate, graph, identify patterns, infer, interpret, make observations, modify, organize, predict, relate, sketch, show, solve, summarize, use context clues

Strategic Thinking

Requires reasoning, developing plan or a sequence of steps, some complexity, more than one possible answer, higher level of thinking than previous 2 levels.

apprise, assess, cite evidence, critique, develop a logical argument, differentiate, draw conclusions, explain phenomena in terms of concepts, formulate, hypothesize, investigate, revise, use concepts to solve non-routine problems

Extended Thinking *Correlates to Bloom's 2 Highest Levels*

*Requires investigation, complex reasoning, planning, developing, and thinking-probably over an extended period of time. *Longer time period is not an applicable factor if work is simply repetitive and/or does not require higher-order thinking.*

analyze, apply concepts, compose, connect, create, critique, defend, design, evaluate, judge, propose, prove, support, synthesize

STEP 9 Students Use the Rubric to Self-Assess & Make Improvements

What we need for successful Reflection and Self-assessment

- Explicit curricular goals – the learning standard and/or core facet/profile.
- Kid-friendly language manifested when unpacking the goal.
- Exemplars showing strong evidence of learning.
- Samples of student work that show a range of proficiency in the learning goal, rather than in the task.
- Task-neutral rubric centering the learning standard.

Tips

- Students reflect on curricular learning goals – learning standards or core competency facets and profiles. Find your desired learning in the curriculum and use the exact language there or paraphrase it in kid-friendly language.
- Students reflect throughout and after the learning process, in the classes when learning standard or core competency facets and profiles are shared, unpacked, taught, and practiced.
- Students can't reflect on or assess anything that hasn't been explicitly taught.
- Students need vocabulary to reflect on complex learning. Set them up to *do* the skill, such as analyze, synthesize or evaluate, then give them the word or a grade-appropriate synonym.