



Learning WITH LEONG

Thank you for using our teacher materials for teaching 21st century skills. For this project, we have used [ACARA](#)'s general capabilities continuum for "[Critical and Creative Thinking](#)" and "[Personal and Social](#)" as a guide and inspiration.

Our focus for the materials that follow is on the specific skill of "**Assessing the Validity of Claims.**"

Here, we try to provide straightforward material that can be used by educators to help make it easier to incorporate 21st century skills into units of study. The materials can be used as-is or altered to fit what works best for the intended audience. This document contains four parts...

1. **Lesson Planning: Questions for Consideration** - These questions are intended to prompt educators to think about the different ways they can incorporate this particular 21C skill into their lessons. The questions are not meant to be prescriptive in any way, nor is it intended that all of them would be applicable to every unit of study. They serve to simply offer ideas for consideration. These questions could be used by individual teachers interested in developing their lessons further, in department meetings to collectively brainstorm ways their specific subject matter could work to incorporate the 4Cs, or during professional development to support teams of teachers during their planning of units of study.
2. **Student Reflection Guide** – This section is intended for use directly with students as a way to help them become more aware of the ways in which they use various 21C skills and to contemplate the ways in which they can strengthen these skills. The guides are designed with the understanding that many of these skills can only be built through application and that metacognitive reflection helps to accelerate the acquisition of these skills. There are three pages for this section. First, a handout for students to complete at the beginning of a unit/project. Second, a check-in giving the students a chance to reflect and for the student or teacher to make some adjustments, perhaps, before the end of a unit of study. Third, a final reflection on the experience as it pertains to this particular 21C topic of focus. As with all of the materials, the expertise of the teacher would determine whether the guides are best used as-is or just in parts and can also be altered to fit the needs of the individual classroom.
3. **Character Analysis** – This section provides a list of questions to be used to examine and reflect on a person's or character's life as it relates to this particular 21C topic. The questions provide a lens through which to view that person's actions. Some examples of how to use them might be to ask students to apply them to the actions of a particular person in history, the professional trajectory of a scientist, the life of a famous

artist/athlete/writer, or a character in a novel. They could be used for group discussion or to produce presentations or essays. The questions can also be applied directly to the student's life, if desired. The hope is that through reflecting on the life of another person and how they demonstrated a particular 21C skill that the students will gain insight into the ways in which these skills impact people and can, perhaps, apply that to their own life as well.

4. **Standards** – In this section, we listed the standards that apply to this particular 21C skill. Specifically, elements from ACARA's continuums that apply to this particular topic are listed with a focus predominantly on Level 6 in the continuum. In addition, standards from several other organizations around the world are also included in order to offer educators more insight as to how 21C skills are discussed and to serve as a resource as they work to incorporate these skills into the curriculum. For more insight to these organizations, please refer to "[21st Century Skills – Resources for Educators.](#)"

We hope that the resources are useful to you!

Lesson Planning

21 Century Capability: Assessing the Validity of Claims

Questions for Consideration:

1. Are students asked to clearly articulate the claim being made?
2. Are students asked to consider the source of the claim and whether it comes from a reliable and credible source?
3. Are students asked to look at the evidence provided in support of a claim and assess whether it is adequate?
4. Are students asked to look at whether reasonable and rational thought is used to support the claim?
5. Are students taught to look for logical fallacies?
6. Are students expected to check information presented for accuracy using multiple sources?
7. Do students have the opportunity to design questions that can be used to assess claims?
8. Are students exposed to a wide range of sources containing potentially conflicting information/claims and given the time and strategies to assess them in order to inform their own choices/positions?

Student Reflection Guide - Anticipatory

21 Century Capability: Assessing the Validity of Claims

In this unit/lesson/project, we are going to be learning to/about _____.
(circle one) (circle one)

Before we begin, please write about what you know about this topic already.

Write about a time you read, heard, or made a claim that was not actually true or lacked evidence/support.

How did you figure out that it wasn't a reliable claim?

What can you take away from that experience and apply to figuring out whether claims are valid in this unit/lesson/project?

What else might you look at to decide the validity of a claim?

Student Reflection Guide – Check In

21 Century Capability: Assessing the Validity of Claims

In this unit/lesson/project, we are learning to/about _____.
(circle one) (circle one)

Please write about what you know about this topic so far.

What sources of information have you used so far?

Have all the sources been reliable and/or credible? Explain.

How did you assess the rationality of their argument or the quality of the evidence presented?

Share one example of a claim you discovered to be false or weak. How did you figure that out?

Student Reflection Guide - Final

21 Century Capability: Assessing the Validity of Claims

In this unit/lesson/project, we learned to/about _____.
(circle one) (circle one)

Please write about what you know about this topic now.

Over the course of this unit/lesson/project, what was the hardest part of assessing the validity of claims?

What was the strongest claim you came across? What made it strong?

What was the weakest claim you came across? What made it weak?

What skills did you learn about assessing the validity of claims that might be useful later? How so?

Character Analysis

21 Century Capability: Assessing the Validity of Claims

Questions for Analysis:

1. Do you think this person was good at assessing the validity of claims? Why or why not?
2. Why was it important for this person to assess the validity of claims?
3. How did this person go about assessing the validity of a claim?
4. What kind of questions did this person ask to assess the validity of a claim?
5. In what ways was assessing claims challenging for this person?
6. Did this person ever fail to assess a claim? What was the impact of that?
7. Did this person ever expose a claim that was false or not credible? Explain.
8. How did this person's skills in assessing the validity of claims help them to...
 - a. accomplish their goal?
 - b. realize their dream?
 - c. overcome an obstacle?
9. What words of wisdom or advice about assessing the validity of claims do you think this person would offer our class if they came to speak with us?

Standards

21 Century Capability: Assessing the Validity of Claims

ACARA v.8.4

CRITICAL AND CREATIVE THINKING

Apply logic and reasoning

4 - assess whether there is adequate reasoning and evidence to justify a claim, conclusion or outcome

ACARA v.9

CRITICAL AND CREATIVE THINKING

Identify, Process, and Evaluate Information

5 - identify and clarify significant information and opinion from a range of sources, including visual information and digital sources; evaluate the accuracy, validity and relevance of the information and opinion to the topic of study

P21

CRITICAL THINKING AND PROBLEM SOLVING

Reason Effectively - Effectively analyze and evaluate evidence, arguments, claims, and beliefs; Analyze and evaluate major alternative points of view

C21 Canada

CRITICAL THINKING

1 - Learners acquire, process, interpret, rationalize and critically analyze large volumes of potentially conflicting information to make informed and timely decisions.

COMMUNICATION

2 - Learners critically interpret and evaluate ideas shared through a variety of media and technologies.

ISTE

1.3. Knowledge Constructor - Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. Students:

1.3.b. evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.

AAC&U

CRITICAL THINKING

Evidence: Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis.

Viewpoints of experts are questioned thoroughly.

Student's Position: Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).

INFORMATION LITERACY

Evaluate Information and Its Sources Critically: Choses a variety of information sources appropriate to the scopes and discipline of the research question. Selects sources after considering the importance (to the researched topic) of the multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).

WRITTEN COMMUNICATION

Sources and Evidence: Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing.