



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 "**Posing Questions and Seeking Knowledge.**"

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: Posing Questions and Seeking Knowledge

Questions for Consideration:

1. Is having a growth mindset modeled, expected, and encouraged?
2. Is the pursuit of knowledge/skills both inside and outside the classroom presented as valuable? Is it modeled, encouraged, and supported?
3. Are there opportunities for students to pursue their own interests and apply them to the discipline/lesson at hand?
4. Are students asked to bring their own expertise/knowledge into class assignments?
5. Are students asked to extend their learning through activities of their own choosing?
6. Is technology used in ways that allow students to pursue/extend their learning?
7. Are there opportunities for students to ask questions and to pursue answers to complex concepts?
8. Are students expected to use a variety of resources in their pursuit of knowledge?
9. Are there opportunities for students to be part of learning communities beyond their class?
10. Are there opportunities to learn from experts in the field?
11. Are there opportunities for students to go beyond the basic mastery of skills/curriculum if so desired?
12. When faced with challenges, are students encouraged to seek out information or build skills as a way to overcome the obstacle?
13. Is learning presented as a way to build understanding between people and across divides?
14. Are there opportunities to connect their knowledge to the world and/or making an impact?
15. Are students asked to reflect on their growth as a learner and a person over time as it connects to their learning pursuits?

Student Reflection Guide - Anticipatory

21 Century Capability: Posing Questions and Seeking Knowledge

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.

How interested are you in this topic? Why?

What might be the use of having knowledge of this topic? What might be some applications of it?

What questions do you have about this topic?

What resources/experiences might be useful to help learn more?

Student Reflection Guide – Check In

21 Century Capability: Posing Questions and Seeking Knowledge

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 resources/experiences have you used so far?

What questions do you have now that might help you learn even more?

What resources might you use going forward?

If you became an expert on this topic, what might you be able to do with this knowledge?

Student Reflection Guide - Final

21 Century Capability: Posing Questions and Seeking Knowledge

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

Please write about what you know about this topic now.

How is what you know now different than what you knew at the beginning of this unit/lesson/project?

What was the most useful resource/experience for learning about this topic?

What was the most interesting resource/experience for learning about this topic?

If you wanted to learn even more, what resources/experiences could you seek out?

Character Analysis

21 Century Capability: Posing Questions and Seeking Knowledge

Questions for Analysis:

1. Do you think this person was a lifelong learner? Why or why not?
2. What was this person curious about?
3. What kind of questions did this person ask?
4. How often did this person seek to learn more about a topic?
5. How did this person go about learning more?
6. What resources/experiences did this person use in order to gain knowledge?
7. Why was it important for this person to pursue knowledge?
8. How did this person and/or their skills change over time as a result of seeking to learn more?
9. How did this person's quest to learn help them to...
 - a. accomplish their goal?
 - b. realize their dream?
 - c. overcome an obstacle?
10. How did this person's lack of ability/desire to learn impact their ability to...
 - a. accomplish their goal?
 - b. realize their dream?
 - c. overcome an obstacle?

Standards

21 Century Capability: Posing Questions and Seeking Knowledge

ACARA v.8.4

CRITICAL AND CREATIVE THINKING

Pose Questions

6 - pose questions to critically analyse complex issues and abstract ideas

Identify and clarify information and ideas

6 - clarify complex information and ideas drawn from a range of sources

ACARA v.9

CRITICAL AND CREATIVE THINKING

Develop Questions

6 - develop questions to investigate complex issues and topics

questions developed facilitate increasing understanding of abstract ideas and concepts

Identify, Process, and Evaluate Information

6 - identify and clarify significant information and opinion from a range of sources, including visual information and digital sources

P21

INITIATIVE AND SELF-DIRECTION

Work Independently - Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise; Demonstrate initiative to advance skill levels towards a professional level; Demonstrate commitment to learning as a lifelong process.

CRITICAL THINKING AND PROBLEM SOLVING

Reason Effectively - Reflect critically on learning experiences and processes

C21 Canada

CHARACTER

1 - Learners demonstrate self-direction, resilience, tolerance and personal productivity, through a commitment to life-long learning when faced with change.

COMPUTER AND DIGITAL TECHNOLOGIES

1 - Learners exercise the power of digital tools in creating new knowledge and connecting it to the world.

2 - Learners continually discover and create digital learning tools and resources to explore new content, concepts, information and ideas.

3 - Learners are fully engaged in the freedom to learn and the freedom to contribute and participate on a global scale using the full capacity of digital technologies and the Web.

1 - Learners develop intellectual and attitudinal dispositions towards creating new knowledge and doing things with it in the world.

AAC&U

FOUNDATIONS AND SKILLS FOR LIFELONG LEARNING

Curiosity: Explores a topic in depth, yielding a rich awareness and/or little-known information indicating intense interest in the subject.

Initiative: Completes required work and generates and pursues opportunities to expand knowledge, skills, and abilities.

Independence: Educational interests and pursuits exist and flourish outside classroom requirements. Knowledge and/or experiences are pursued independently.

Reflection: Reviews prior learning (past experiences inside and outside of the classroom) in depth to reveal significantly changed perspectives about educational and life experiences, which provide foundation for expanded knowledge, growth, and maturity over time.

INTEGRATIVE LEARNING

Reflection and Self-Assessment: Envisions a future self (and possibly makes plans that build on past experiences that have occurred across multiple and diverse contexts).

INTERCULTURAL KNOWLEDGE AND COMPETENCE

Attitudes - Curiosity: Asks complex questions about other cultures, seeks out and articulates answers to these questions that reflect multiple cultural perspectives.