



# Learning WITH LEONG

Thank you for using our teacher materials for teaching 21<sup>st</sup> 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 "**Planning a Course of Action.**"

Here, we try to provide straightforward material that can be used by educators to help make it easier to incorporate 21<sup>st</sup> 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 "[21<sup>st</sup> Century Skills – Resources for Educators.](#)"

We hope that the resources are useful to you!

## **Lesson Planning**

### **21 Century Capability: Planning a Course of Action**

#### **Questions for Consideration:**

1. Are students asked to clearly and accurately define the problem/goal?
2. Are students asked to brainstorm a variety of approaches to addressing the problem/reaching the goal?
3. Are students asked to gather information that would inform their course of action?
4. Are students asked to articulate the reasons for the approach they selected?
5. Are students asked to consider what resources are needed?
6. Are students asked to create a detailed course of action?
7. Are students asked to create a timeline for their plans?
8. Is technology used in ways that help the students plan out how they will go about addressing the problem/reaching the goal?
9. Are students asked to consider ways in which technology might play a role in helping address the problem/reaching the goal?
10. Are students asked to anticipate complications and to create a plan for addressing them?
11. Is there time given to students to periodically evaluate their plan and make adjustments as needed?

## Student Reflection Guide - Anticipatory

### 21 Century Capability: Planning a Course of Action

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.

What is the problem (or goal) you will be addressing in this unit/lesson/project?

How might you go about addressing this problem/reaching this goal?

What might you need to consider as you plan your course of action? (i.e. resources, potential complications)

How long do you think this work might take?

## Student Reflection Guide – Check In

### 21 Century Capability: Planning a Course of Action

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 is going well so far?

Have there been any complications or changes that impacted your plan? Explain.

What new information have you received (results, knowledge, etc.) that might inform you plan going forward?

What, if any, adjustments do you need to make to your plan of action?

## Student Reflection Guide - Final

### 21 Century Capability: Planning a Course of Action

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

Please write about what you know about this topic now.

How effective would you say your plan was in addressing the problem/reaching the goal?

Did the timeline for your plan go as you expected? Why or why not?

Over the course of this unit/lesson/project, did the steps in your plan/approach change at all?  
Why or why not?

How did you deal with any complications or new information that came up?

In retrospect, would you have changed anything in your plan? Explain.

## Character Analysis

### 21 Century Capability: Planning a Course of Action

#### Questions for Analysis:

1. Do you think this person was good at planning a course of action? Why or why not?
2. What were the problems this person was trying to solve? Or what was their goal?
3. How did this person go about planning their course of action?
4. How did they go about gathering information that would help them create an effective course of action? What information did they gather?
5. What were the complexities this person had to consider?
6. Was the person able to stick with the timeline they had? Why or why not?
7. How did this person change their plans when faced with complications or new information?
8. How did this person's skills in planning an effective course of action help them to...
  - a. accomplish their goal?
  - b. realize their dream?
  - c. overcome an obstacle?
9. How did this person's lack of ability to plan an effective course of action prevent them from...
  - a. accomplishing their goal?
  - b. realizing their dream?
  - c. overcoming an obstacle?

## **Standards**

### **21 Century Capability: Planning a Course of Action**

#### **ACARA v.8.4**

##### **CRITICAL AND CREATIVE THINKING**

Draw conclusions and design a course of action

6 - use logical and abstract thinking to analyse and synthesise complex information to inform a course of action

##### **PERSONAL AND SOCIAL CAPABILITY**

Become confident, resilient and adaptable

4 - devise strategies and formulate plans to assist in the completion of challenging tasks and the maintenance of personal safety

#### **ACARA v.9**

##### **CRITICAL AND CREATIVE THINKING**

Put Ideas into Action

6 - put ideas into action by making predictions, testing and evaluating options, proposing modifications and adapting approaches in complex or unfamiliar situations

Draw Conclusions and Provide Reasons

6 – draw conclusions and make choices when completing tasks, using analysis of complex evidence and arguments before making recommendations

##### **PERSONAL AND SOCIAL CAPABILITY**

Perseverance and Adaptability

6 - devise, evaluate and adapt strategies to engage with unexpected or challenging situations

#### **P21**

##### **PRODUCTIVITY AND ACCOUNTABILITY**

Manage Projects - Set and meet goals, even in the face of obstacles and competing pressures; Prioritize, plan, and manage work to achieve intended results

#### **C21 Canada**

##### **CRITICAL THINKING**

2 - Learners apply higher order thinking skills in a logical process to solve ill-defined problems by identifying and describing the problem, critically analyzing the information, creating knowledge required, framing and testing various hypotheses.

#### **ISTE**

1.4. Innovative Designer - Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:

1.4.a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

#### **AAC&U**

##### **CREATIVE THINKING**



Solving Problems: Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.

#### INFORMATION LITERACY

Access the Needed Information: Accesses information using effective, well-designed search strategies and most appropriate information sources.

#### INQUIRY AND ANALYSIS

Design Process: All elements of the methodology or theoretical framework are skillfully developed. Appropriate methodology or theoretical frameworks may be synthesized from across disciplines or from relevant subdisciplines.

#### PROBLEM SOLVING

Define Problem: Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.

Identify Strategies: Identifies multiple approaches for solving the problem that apply within a specific context.

Propose Solutions/Hypotheses: Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem. Solution/hypotheses are sensitive to contextual factors as well as all of the following: ethical, logical, and cultural dimensions of the problem.

Evaluate Potential Solutions: Evaluation of solutions is deep and elegant (for example, contains thorough and insightful explanation) and includes deeply and thoroughly, all of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.