

Unit Summative: Integrating Models of Climate Change and Proposing Solutions

INTRODUCTION: During this climate change unit, you have learned about the earth's weather and climate. You have encountered theories that attempt to explain phenomena and evaluated evidence to determine the validity of such theories. In this summative, you will be using a model of multiple hypotheses developed at the Rotman School of Management, University of Toronto, to understand the problems faced when humans try to respond to climate change in a meaningful and implementable way.

LEARNING GOALS: To understand conflicting viewpoints on proposed solutions to problems originating in climate change and rather than picking one over the other, learning to use the tension in that conflict to integrate and arrive at a new model of thinking that is better than either pre-existing model. Once you have successfully developed an integrated model, you will reflect on how the new model will affect you personally.

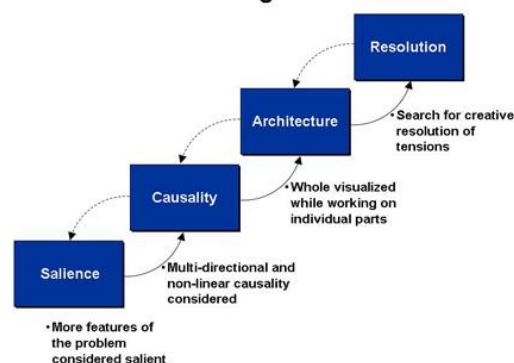
SUCCESS CRITERIA:

- (A) Ability to explore two models of climate change responses in detail and provide support for each model;
- (B) Ability to integrate the models to create a new understanding of climate change; and
- (C) To identify pros and cons, and effect of integrated model on personal life and society.

TIMELINE FOR THE SUMMATIVE:

Day	A – Date	B – Date	What are you doing?	Product:
1	Mar 25	Mar 26	Learning about Integrative Thinking. Select your model, identify key stakeholders for each model, identify benefits of model for stakeholders and select those benefits that are found in both models.	Submit your group sheet to the teacher for use on day two.
2	Mar 28	Mar 27	Creating an integrated model. Brainstorm and record ideas that will allow you to take the best of the two opposing models. Cluster ideas and decide on priorities for your model. Organize your new model and synthesize implications for stakeholders.	Complete your group's ideas sheet and new model sheet and hand into teacher.
3	April 03	April 02	Implication Reflection: Individually, you will now consider the effects of your new model on you as an individual and on society as a whole and write a reflection on what changes if any the new model provides in our thinking about responses to climate change.	Submit your reflection at the end of the period for grading (AoL)

The Practices of Integrative Thinkers



Reflection Rubric

Assessment Strand	Level 4	Level 3	Level 2	Level 1
4 KU	Student uses terms and facts related to climate change accurately and appropriately in reflection. Concepts and understanding of the nature of climate change is integrated into the reflection.	Student uses terms and facts related to climate change in reflection. Concepts and understanding of the nature of climate change are referred to correctly in the reflection.	Student uses some terms and facts related to climate change in reflection. Concepts and understanding of the nature of climate change are referred to in the reflection.	Student uses few or no terms and facts related to climate change in reflection. Concepts and understanding of the nature of climate change are rarely referred to in the reflection.
8 TI	Student displays strong critical thinking skills in integrating the two models and analyzing the consequences of the integrated model. The responses proposed are logically linked to the specific problem models given to the student.	Student displays critical thinking skills in integrating the two models and analyzing the consequences of the integrated model. The responses proposed are linked to the specific problem models given to the student.	Student displays some critical thinking skills in integrating the two models and analyzing the consequences of the integrated model. The responses proposed are linked to the problem models given to the student.	Student displays few or no critical thinking skills in integrating the two models and analyzing the consequences of the integrated model. The responses proposed are not clearly linked to the problem models given to the student.
4 C	The reflection is well written, communicates ideas clearly and succinctly. There are no spelling mistakes or grammar errors.	The reflection is well written, communicates ideas succinctly. There are a few spelling mistakes and/or grammar errors.	The reflection is written and communicates ideas succinctly. There are some spelling mistakes and/or grammar errors.	The reflection is poorly written and ideas are not communicated to the audience. There are many spelling mistakes and/or grammar errors.
8 A	The reflection applies ideas learned in class to real world situations and proposes meaningful solutions to problems facing society. Stakeholders are correctly identified and the resolutions are effective, appropriate and critically thought out.	The reflection applies many ideas learned in class to real world situations and proposes solutions to problems facing society. Stakeholders are identified and the resolutions are effective and appropriate.	The reflection applies some of the ideas learned in class to real world situations and proposes a few solutions to problems facing society. Some stakeholders are identified and the resolutions are appropriate.	The reflection applies few of the ideas learned in class to real world situations and proposes few or no solutions to problems facing society. Stakeholders are mis/ not identified and the resolutions are inappropriate or ineffective.