

Creating Curriculum-Framing Questions to Support Thinking Skills

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## MODULE 3

# Creating Curriculum-Framing Questions to Support Thinking Skills

**Description:** Curriculum-Framing Questions help students find deeper meaning as they work on projects. In this module, you discuss the general types of questions used in the classroom, practice with and create Curriculum-Framing Questions for your own classroom, and reflect on how these questions can affect and support deeper thinking.

## Activity 1: Ranking Questions

### Step 1: Ranking Questions

Different types of questions elicit different types of thinking. With a partner, use the *Visual Ranking Tool* to rank questions (based on the *River City Water* project idea from Module 1) according to their potential for generating deeper thinking in the classroom. Use the Intel® Education Help Guide for technical assistance, if necessary.



1. Open *Visual Ranking* from your Favorites. ([www.intel.com/education/visualranking](http://www.intel.com/education/visualranking))
2. Click **Student Log-In**.
3. Log in to the **Student Workspace** with the student login created for the *Seeing Reason* "Thinking" project used in Modules 1 and 2.



**Note:** Your login information may be located on Overview page vi.

4. The student workspace will open. Under *Project Name*, click the project, **Ranking Questions**, and the *Visual Ranking* workspace will open.



5. Working with your partner, decide on the appropriate locations for the various questions. Click and drag an item up or down to the location where you think it belongs in relation to the other items. (See Teaching Tools, Visual Ranking Tool Skill 1.15.)

Participants should work in pairs and log in using only one partner's login information.

Refer to the following skill in the Help Guide for this section:

- Visual Ranking Tool Skill 1.15: Ranking items in a list

## Creating Curriculum-Framing Questions to Support Thinking Skills

Refer to the following skills in the Help Guide for this section:

- Visual Ranking Tool Skill 1.16: Commenting on an item
- Visual Ranking Tool Skill 1.17: Opening and closing a comment attached to an item
- Visual Ranking Tool Skill 1.18: Editing a comment attached to an item
- Visual Ranking Tool Skill 1.20: Comparing lists
- Visual Ranking Tool Skill 1.21: Understanding results
- Visual Ranking Tool Skill 1.22: Understanding correlations



6. Add a comment to any of the items to explain your ranking choice. Your comment should reflect the criteria for ranking (that is, defend the item’s location in the list and why it is higher or lower than the others). (See Teaching Tools, Visual Ranking Tool Skill 1.16.)

**Note:** The amount of text in the comment box is not limited since it is scrollable. An item with a red triangle in the upper right-hand corner means a comment has been added. (See Teaching Tools, Visual Ranking Tool Skill 1.17.)

7. When you finish ranking, **Compare** the currently viewed list to another group’s list. (See Teaching Tools, Visual Ranking Tool Skill 1.20.)

**Note:** You cannot edit or add to another team’s comments. You can only edit comments that you created. (See Teaching Tools, Visual Ranking Tool Skill 1.18.)

8. Note the correlation number as another way to determine two lists’ similarities. (See Teaching Tools, Visual Ranking Tool Skills 1.21 and 1.22.)

**Note:** Additional information about correlation is available in Understanding Correlation in the *Thinking Tools, Visual Ranking* folder on the Curriculum Resource CD.

### Step 2: Discuss Your Ranking



After you complete your ranking and view comparisons with other teams, discuss any significant variations of the rankings with your partner.

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### Creating Curriculum-Framing Questions to Support Thinking Skills



As a whole group, discuss your experience ranking the questions from the *River City Water* project idea.

- What did you and your partner discuss as you decided on the order of the list?
- How did your ranking differ from other teams? Did their comments help you understand other ways of thinking about the items?
- What was your highest ranked item and why?

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### Creating Curriculum-Framing Questions to Support Thinking Skills

## Activity 2: Asking Questions in the Classroom

### Step 1: Understanding Open and Closed Questions

Questions are what we often use to help our students think through a problem or issue. If our questions are not designed carefully, we most likely will not get the results we intend from our students. As we saw in the previous activity, different types of questions accomplish different tasks. Fact-finding, interpretive, and reflective questions, for example, all serve different purposes and require different thinking skills. We can organize these questions into two basic categories: closed questions and open questions.

#### Closed questions:

- Test factual knowledge
- Contain a limited range of possible correct responses
  - Example: What lives in the rainforest?
- Guide learner thought
  - Provide learners with the knowledge base to answer other questions

#### Open questions:

- Build on factual knowledge
- Require research, investigation, and reflection prior to answering completely
- Have many different answers, promoting student discussion, debate, and inquiry
- Necessitate learners to go deeper into a topic—expand their thinking
- Call for learners to construct their knowledge as they answer the questions
- Often start with key words such as *why* and *how*:
  - *Why* questions often require looking at relationships among variables and analyzing information
  - *How* questions could lead to problem solving and synthesizing information
  - Other key words can also be used in open questions, but with less frequency
  - *Which* questions may lead to thoughtful decision making, and *what* questions could lead to reflection
  - Example: Why is the rainforest important to us?

## Creating Curriculum-Framing Questions to Support Thinking Skills

Closed questions that ask students to understand facts and procedures are important, but if students do not have a larger concept to connect those facts, the importance of those facts will not be understood and the facts will not be retained or used in a meaningful way.

*The new science of learning does not deny that facts are important for thinking and problem solving. Research on expertise...demonstrate that experts' abilities to think and solve problems depend strongly on a rich body of knowledge about subject matter (e.g., Chase and Simon, 1973; Chi et al., 1981; deGroot, 1965). However, the research also shows clearly that 'usable knowledge' is not the same as a mere list of disconnected facts. Experts' knowledge is connected and organized around important concepts...*

Bransford, Brown, & Cocking, *How People Learn*, p. 9

Effective open-ended questions are especially important when using technology in learning. Instead of using computers to copy and paste information, students should use higher-order thinking skills to dig deep, analyze facts, make well-founded conclusions, and see the big picture.



**Note:** You may also want to review the resources on questioning available at:

[www.intel.com/education/designprojects](http://www.intel.com/education/designprojects)

Click **Project Design**, click **Instructional Strategies**, and then click **Questioning**.

### Quick Reflection

Discuss the following with a partner:



1. What is the "right" balance between closed and open questions for your classroom?

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2. How can you make sure that students are really thinking more deeply when using open questions?

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Creating Curriculum-Framing Questions to Support Thinking Skills

**Step 2: Reflecting on Questions Used in Your Classroom**

Think about the questions you ask in a typical day in your classroom as you consider these questions.

1. The questions I ask during classroom discussions can usually be answered with a "yes" or a "no" or a very limited answer.

Strongly Disagree      Disagree      Agree      Strongly Agree

2. My questions are primarily used to check for basic understanding of the facts.

Strongly Disagree      Disagree      Agree      Strongly Agree

3. My questions encourage students to thoughtfully delve into a topic or think at higher levels about the subject matter.

Strongly Disagree      Disagree      Agree      Strongly Agree

4. My students are taught how to express their opinions and ideas, as well as how to appropriately respond to others' opinions and ideas.

Strongly Disagree      Disagree      Agree      Strongly Agree

5. Debates and open-ended discussions are often a part of my class.

Strongly Disagree      Disagree      Agree      Strongly Agree

Other thoughts:

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## Creating Curriculum-Framing Questions to Support Thinking Skills

### Activity 3: Developing Curriculum-Framing Questions

#### Step 1: Defining Curriculum-Framing Questions

Students are more likely to become self-directed learners if they are interested in the answers. Students who see the connections between the subjects being taught and their own world can build on their knowledge to gain a deeper understanding. Curriculum-Framing Questions promote interest, relevance, and understanding.

Curriculum-Framing Questions guide a unit of study and include:

- **Essential Questions**
  - The overarching, foundational, “big idea” question (open-ended questions)
  - Can help focus several units or be used over the course of a year
  - Example: What does it take to change the world?
- **Unit Questions**
  - Unit-specific, open-ended questions that help build understanding for the Essential Question
  - Examples:
    - Unit 1: Why leave one’s home to make a new life in a strange land?
    - Unit 2: How did the \_\_\_\_\_ Revolution change their world and ours?
    - Unit 3: Why do we still read Shakespeare?
- **Content Questions**
  - Supporting, fact-based questions (closed questions)
  - Rich subject matter content to help strengthen and develop students’ understanding of the larger questions
  - Examples:
    - Unit 1: What route did the early explorers take? What were they looking for?
    - Unit 2: Who were the key figures in the \_\_\_\_\_ Revolution?
    - Unit 3: What is a tragedy?

This activity may be a review for some, but new for others. Laying a basic, foundation ensures that all participants have the same understanding of Curriculum-Framing Questions before delving deeper. These activities should also help to strengthen and develop your current knowledge of Curriculum-Framing Questions. If you are familiar with these types of questions, please share your expertise in this activity’s discussions.

Creating Curriculum-Framing Questions to Support Thinking Skills

	Essential Questions	Unit Questions	Content Questions
Definition	<p>Essential Questions are the most abstract question in a chain of questions. An Essential Question serves as an overarching conceptual framework for a group of curricula or even a whole year’s worth of study.</p> <p>Essential Questions:</p> <ul style="list-style-type: none"> <li>▪ Are open-ended questions</li> <li>▪ Can provide a bridge between disciplines and/or units of study</li> <li>▪ Focus on a core message or theme in the curriculum</li> <li>▪ Are engaging and meaningful</li> <li>▪ Help students to understand facts and ideas in a conceptual framework</li> <li>▪ Require higher-order thinking skills to                             <ul style="list-style-type: none"> <li>- Evaluate</li> <li>- Synthesize</li> <li>- Analyze</li> </ul> </li> </ul>	<p>Unit Questions asked in one course of study can explore different facets of a single Essential Question. Teams of teachers from different disciplines can use their own unique Unit Questions to support one common, unifying Essential Question.</p> <p>Unit Questions:</p> <ul style="list-style-type: none"> <li>▪ Are open-ended questions</li> <li>▪ Invite an exploration of ideas within a topic</li> <li>▪ Are specific to a unit of study</li> <li>▪ Support the exploration of one part of the Essential Question</li> <li>▪ Help students to understand facts and ideas in a conceptual framework</li> <li>▪ Require higher-order thinking skills to                             <ul style="list-style-type: none"> <li>- Evaluate</li> <li>- Synthesize</li> <li>- Analyze</li> </ul> </li> </ul>	<p>Content Questions differ from Unit and Essential Questions as Content Questions deal mostly with facts, rather than the interpretation of those facts.</p> <p>Content Questions:</p> <ul style="list-style-type: none"> <li>▪ Typically have clear-cut answers or specific “right” answers</li> <li>▪ Are categorized as closed questions</li> <li>▪ Directly support content standards and learning objectives</li> <li>▪ Require knowledge and comprehension skills to answer</li> </ul>

(Continued)

Creating Curriculum-Framing Questions to Support Thinking Skills

	Essential Questions	Unit Questions	Content Questions
How are they different?	<p>An Essential Question:</p> <ul style="list-style-type: none"> <li>Requires time—several units—to fully understand and answer the question</li> <li>Contains a broader topic or concept than is referenced in the Unit Question</li> <li>May be a question studied by scientists, philosophers, or poets</li> </ul>	<p>A Unit Question:</p> <ul style="list-style-type: none"> <li>Can be answered within one unit of study</li> <li>Is broad enough to cover most of the ideas within the unit so that it can provide a unifying focus</li> <li>Often connects to the students' own world or includes a personal reflection</li> </ul>	<p>A Content Question:</p> <ul style="list-style-type: none"> <li>Is often the kind of question you would find on a multiple-choice or short-answer test</li> </ul>
Example	<ul style="list-style-type: none"> <li>Why do we need others?</li> </ul>	<ul style="list-style-type: none"> <li>Which of our community helpers is the most important?</li> <li>Which community helper would you most like to be?</li> </ul>	<ul style="list-style-type: none"> <li>Who are some community helpers?</li> <li>What do community helpers do?</li> </ul>

Creating Curriculum-Framing Questions to Support Thinking Skills

**Step 2: Practicing with Questions**

Think about the characteristics of Essential Questions from the previous pages and the examples from Appendix C. Use these characteristics and models to help determine which of the following are Essential Questions. Check “Yes,” “No,” or “Maybe” after each one.



Some of the questions could be used in a variety of ways—a question is defined as Essential, Unit, or Content in large part by how it is used in the classroom. Discuss in a small group any questions that could go multiple ways—and why.

Essential Question or Not?	Yes	No	Maybe
How does literature help us to better understand ourselves?			
What is a national deficit?			
How do we decide what claims to believe?			
Is being bad for a good reason ever OK?			
What technological improvements have resulted from space exploration?			
What are the elements of a fairy tale?			
How are different rocks formed?			
What does the past tell us about the future?			

**Notes:**

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Creating Curriculum-Framing Questions to Support Thinking Skills

The questions in the left column below are a mix of Essential, Unit, and Content Questions. Determine which questions are Essential, Unit, and Content. Place a checkmark in the column that best identifies each question: "EQ" for Essential, "UQ" for Unit, or "CQ" for Content. Discuss your answers with your small group.



Mixed Questions – Unit 1	EQ	UQ	CQ
Where did early explorers go?			
How did early explorers change the world?			
Who are some of the early explorers?			
What does it take to change the world?			
What impact did explorers have on their home country?			

Mixed Questions – Unit 2	EQ	UQ	CQ
How do the endings of Cinderella differ across cultures?			
Are we really so different from our neighbors?			
What are common themes among fairy tales?			
What can we learn about ourselves and other people by reading fairy tales?			
How do fairy tales reflect one's culture?			
What is the basic plot of almost all Cinderella stories?			
What are the definitions of plot, conflict, climax, and resolution?			

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## Module 3

### Creating Curriculum-Framing Questions to Support Thinking Skills

In order to develop an Essential Question, identify the “big idea”—or the overarching concept—that you will be teaching. This concept should serve as the focus of the unit, including curriculum, instruction, and assessment. These ideas provide the framework in which students will connect specific knowledge and skills to see the purpose and relevance of the topic they are studying. Often, these concepts are found in your content standards. Listed below are some big idea concepts.

Abundance	Diversity	Journey	Relationship
Acceptance	Energy	Justice	Repetition
Accommodation	Environment	Law	Responsibility
Adaptation	Equality	Leadership	Rhythm
Aging	Equilibrium	Liberty	Rights
Balance	Ethics	Life	Risk
Beauty	Evil	Limits	Rule
Belief	Evolution	Loyalty	Scale
Change	Excellence	Matter	Scarcity
Chaos	Exploration	Maturity	Strength
Character	Fairness	Migration	Stress
Choice	Family	Mood	Structure
Citizenship	Fate	Motivation	Survival
Civilization	Force	Need	Symbol
Communication	Form	Order	System
Community	Freedom	Ownership	Temptation
Competition	Friendship	Patriotism	Time
Conflict	Future	Pattern	Tranquility
Connection	Geography	Perspective	Truth
Continuity	Goodness	Pollution	Tyranny
Cooperation	Happiness	Power	Universe
Courage	Harmony	Production	Value
Creativity	Hate	Progress	Variable
Cycle	Honor	Proof	Variance
Death	Identity	Proportion	Virtue
Defense	Individuality	Protection	Wealth
Democracy	Integrity	Purpose	Wellness
Destruction	Interaction	Reason	Wonder
Dignity	Interdependence	Reflection	
Discovery	Invention	Rejection	

Creating Curriculum-Framing Questions to Support Thinking Skills

Note any other big idea words that are not listed:

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You do not need to revise all of the questions in the tables on the following pages. As a team, choose one question in a topic area that you are comfortable revising. If time allows, you can revise a second Essential Question.

Revising Essential Questions Using “Big Ideas”



With a partner, pick one or more of the Essential Questions in the following tables. Brainstorm some big ideas that could relate to each Essential Question. The questions in the left column should be considered “first draft” and still needing improvement. After identifying one or more big ideas for the question(s) you want to improve, work together to revise at least one of the Essential Questions based on one or more of the big ideas. You may want to refer to the information on page 3.07.

Original Essential Question	Big Idea	Revised Essential Question
What are the physical characteristics of a country and how do they affect humans?		
How is my health affected by my actions?		
How can strangers tell <i>my</i> story?		

(Continued)

## Module 3

### Creating Curriculum-Framing Questions to Support Thinking Skills

Original Essential Question	Big Idea	Revised Essential Question
Why are the stages of a frog's life important?		
How do forensic scientists use the scientific procedures to solve a crime?		
Why is gathering accurate facts important when compiling information?		
How and why did people explore the world?		
Why is my animal important to the rainforest and the world?		



Creating Curriculum-Framing Questions to Support Thinking Skills

**Step 3: Writing Essential and Unit Questions**



Divide into small groups and review the Curriculum-Framing Questions Rubric available in the *Curriculum-Framing Questions* folder on the Curriculum Resource CD.

Think about the Content Questions listed below and how the questions could be used in a unit of study. Think about some of the larger concepts to which the Content Questions relate.

Create Essential and Unit Questions that will motivate students and target higher-order thinking. Remember that both types of questions should be open-ended questions. A Unit Question is tied more directly to the specific unit; whereas, an Essential Question often can encompass a number of units. Remember to write questions in student-appropriate language. Use the Curriculum-Framing Questions Rubric as you draft your questions.



**Note:** You may want to review the sample Curriculum-Framing Questions starting on Appendix C.01.

Content Questions	Unit Questions	Essential Question
<p><b>Example:</b></p> <p><b>Who are some community helpers?</b></p> <p><b>What do they do?</b></p> <p><b>(Primary Level)</b></p>	<p><b>Which of our community helpers is the most important?</b></p> <p><b>Which community helper would you most like to be</b></p>	<p><b>Why do we need others?</b></p>
<p>What lives in a rainforest?</p> <p>Where are the rainforests?</p> <p>(Elementary)</p>		
<p>What are some important inventions of the last 100 years?</p> <p>(Upper Elementary–Lower High School)</p>		

(Continued)

## Module 3

### Creating Curriculum-Framing Questions to Support Thinking Skills

Content Questions	Unit Questions	Essential Question
What are the qualities of a Greek hero? Who are some famous heroes of the 20th century? (Middle School)		
What is debt? What is a national deficit? How much is a billion? How much is a trillion? (Middle School)		
What is Impressionism? Who were some Impressionist painters? (Middle-High School)		
What are some communicable diseases? How do antibiotics work? How do doctors and scientists identify and treat new strains of viruses? (High School)		

What thinking skills could be employed from your "Habits of Learning Taxonomy" (pages 1.23-1.24 or in your Unit Plan) to answer the question(s) you created above?

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Creating Curriculum-Framing Questions to Support Thinking Skills

## Activity 4: Supporting Higher-Order Thinking Skills with Curriculum-Framing Questions

### Step 1: Looking Deeper into a Unit



After you generate questions, using them effectively throughout a unit is important. Curriculum-Framing Questions can be used to generate discussions, focus reflections, guide research, and refocus student work, for example. Below are the Curriculum-Framing Questions from the *Grow a Business* unit plan. With a partner, review and discuss these questions and the unit’s procedural section, which can be found in Appendix E.05.

#### Curriculum-Framing Questions for *Grow a Business* Unit Plan

Essential Question Why take the risk?

Unit Questions How do we grow a business?  
How do you convince others?

Content Questions What is the difference between a producer and a consumer?  
In what ways can surveys help us to make decisions?  
What is marketing?  
What is profit?



1. Open *Visual Ranking* from your Favorites. ([www.intel.com/education/visualranking](http://www.intel.com/education/visualranking))
2. Click **Project Examples**, and then click **Unit Plans**.
3. Click **Grow a Business**.
4. How are Curriculum-Framing Questions used in this unit? How do the Curriculum-Framing Questions help to focus the unit?

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5. How do the Curriculum-Framing Questions help to target higher-order thinking skills?

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Creating Curriculum-Framing Questions to Support Thinking Skills

**Step 2: Focusing on Curriculum-Framing Questions Used in Units**



1. Open: [www.intel.com/education/designprojects](http://www.intel.com/education/designprojects)
2. Add this page to your Favorites.
3. Click **Unit Plan Index**.
4. Click any of the desired links to search for plans specific to a grade level or subject area.
5. Click the title of any unit or project of interest to view the full set of Curriculum-Framing Questions.
6. When viewing the unit procedures, focus on how the Curriculum-Framing Questions are infused throughout the lessons.
7. What ideas did you find for your classroom?

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9. Write any ideas for Curriculum-Framing Question that you might be able to use in your own classroom.

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**Note:** You may also want to review the Curriculum-Framing Question resources in the *Curriculum-Framing Question* folder on the Curriculum



Resource CD or available at: [www.intel.com/education/designprojects](http://www.intel.com/education/designprojects)

Click **Project Design**, and then click **Curriculum-Framing Questions**.

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## Creating Curriculum-Framing Questions to Support Thinking Skills

### Activity 5: Writing Your Own Curriculum-Framing Questions

#### Step 1: Creating a First Draft of Questions


Writing Curriculum-Framing Questions often takes time and practice, and usually requires many revisions. Some teachers find the process easier if they start with a big idea, draft an Essential Question, and then work on Unit and Content Questions. Other teachers find the process easier if they look at the specific units they teach to see how they fit into a bigger idea and then develop an Essential Question.

No matter which method or process you choose, below are some tips for writing an Essential Question:

- Think about why you are studying this material. Why do we care about this? What is the value of studying this?
- What is the big concept you are trying to uncover? What is the long-term understanding that you want students to gain?
- Do your standards have any “big concept” words that you could work from and build on?
- Do not worry about the mechanics and language. Focus on brainstorming.
- Stay away from questions asking for definitions or an understanding of a simple process.
- Ask yourself if the question has basically only one, or one narrow group, of correct answers—if it does, it is not an Essential or Unit Question.
- You may want to write the questions in adult language to capture the essential understandings, and then rewrite in student language.

## Creating Curriculum-Framing Questions to Support Thinking Skills

### A Process for Writing Your Own Questions

1. View the sample Essential and Unit Questions in Appendix C for ideas.
-  2. If you would like some guidance as you create your Curriculum-Framing Questions, open "Writing Curriculum-Framing Questions" in the *Curriculum-Framing Questions* folder on the Curriculum Resource CD. If not, skip this step.
3. Using the guidelines on the previous pages, draft your Curriculum-Framing Questions in the table below.

Essential Question	
Unit Question(s)	
Content Questions	

## Creating Curriculum-Framing Questions to Support Thinking Skills

### Step 2: Targeting Thinking Skills When Revising Questions

1. Open your Unit Plan and review the thinking skills listed in your “Habits of Learning Taxonomy.”
2. What thinking skills are necessary to answer your current draft of Curriculum-Framing Questions? Consider whether any of your questions should be revised to better target those thinking skills.
3. Type this second draft of Curriculum-Framing Questions in your Unit Plan.



4. Save your Unit Plan.

### Second Draft of Curriculum-Framing Questions

Essential Question	
Unit Question(s)	
Content Questions	

**Activity 6: Sharing Your Curriculum-Framing Questions**



Share your Curriculum-Framing Questions with a small group and request ideas for improvement. Write any feedback or revision ideas on the lines below and/or update your Curriculum-Framing Questions in your Unit Plan.

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## Creating Curriculum-Framing Questions to Support Thinking Skills

### Activity 7: Supporting Thinking

Similar to how the *Seeing Reason Tool* could be used in the classroom, you now return to the *Seeing Reason* workspace to clarify and document new insights and knowledge. Considering your work with Curriculum-Framing Questions, think about any additional factors you might want to add to your map from the perspective of a student. How would your students answer the question, *What makes you really think?* Use the Help Guide for technical assistance, if necessary.



Refer to the following skills in the Help Guide for this section:

- Teaching Tools, Seeing Reason Tool Group 2

#### Step 1: Updating Your Map



1. With your partner, open *Seeing Reason* from your Favorites. ([www.intel.com/education/seeingreason](http://www.intel.com/education/seeingreason))

2. Log in to the Student Workspace.



**Note:** Your login information may be located on Overview vi.

3. Add more factors to your map from the perspective of a student in your classroom.

4. Assign a different color to these factors than the color used in Modules 1 and 2.

5. Add the causal relationships between the factors.



6. When you are done adding your factors and relationships, add this current version of the map into your portfolio.

Remember to add your map to your portfolio at the end of the activity.

#### Step 2: Reflecting on Curriculum-Framing Questions to Support Thinking Skills



As a whole group, discuss your thoughts about using Curriculum-Framing Questions in your classroom and how using these questions might impact student learning and higher-order thinking skills.

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### Creating Curriculum-Framing Questions to Support Thinking Skills

#### Extension Activity Focusing on Essential Questions

The following resources are available to you for self-study or as an optional extension within your course.

For a different perspective on Essential Questions, read “The Blue Blood is Bad, Right?” on the Curriculum Resource CD.



1. Start the Curriculum Resource CD and open the *Curriculum-Framing Questions* folder.
2. Open and read “The Blue Blood Is Bad, Right?”
3. Review the Curriculum-Framing Questions Rubric located in the *Curriculum-Framing Questions* folder on the Curriculum Resource CD.
4. Review the definitions of Curriculum-Framing Questions on page 3.07.



- Note:** For additional resources on Curriculum-Framing Questions, see the *Curriculum-Framing Questions* folder on the Curriculum Resource CD.
5. Revise your Curriculum-Framing Questions before you share them in the next module.

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## Creating Curriculum-Framing Questions to Support Thinking Skills

### References

Bransford, J., Brown, A., & Cocking, R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school* (Expanded edition). Washington, DC: National Research Council, National Academy Press.

Simon, K. G. (2001). *Moral questions in the classroom: How to get kids to think deeply about real life and their schoolwork* (pp. 240-241). New Haven and London: Yale University Press.

## Module 3

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### Creating Curriculum-Framing Questions to Support Thinking Skills

Use this summary to review this module's main points and check for understanding.

#### Module 3 Summary

Review the central ideas in this module and the plans or materials you created to help improve student learning.

##### Module 3 Key Points:

- Closed questions that ask students to understand facts and procedures are important, but if students do not frame facts in a conceptual understanding, the interconnectedness and patterns of ideas are often lost. Curriculum-Framing Questions help to provide a conceptual understanding.
- Curriculum-Framing Questions can be created from the bottom up (content-specific ideas to the big idea) or the top down (big idea to the content-specific ideas). They consist of:
  - Essential Questions, the overarching big idea questions that help students see the big picture across units or disciplines
  - Unit Questions, the open-ended questions that support the exploration of one part of the Essential Question
  - Content Questions, the supporting, fact-focused questions required to understand and begin to answer the Essential and Unit Questions
- Curriculum-Framing Questions are used throughout a unit to focus learning on important concepts and to promote higher-order thinking.

##### Accomplishments:

- Gained a greater understanding of Curriculum-Framing Questions through examples, discussion, and practice
- Created a set of Curriculum-Framing Questions for my classroom

In the following modules, we build on these concepts as we discuss ways we can support and assess higher-order thinking skills in classroom projects.