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Module 11

Completing Your Unit

Description: In this module, you complete your Unit Plan that integrates one or more of the online thinking tools. You analyze the effectiveness of the thinking tools in their support of unit objectives and standards, finalize your unit’s Assessment Plan, and create one or more assessments for your unit using the *Assessing Projects* application. After reviewing and making adjustments to your unit, you use implementation questions to guide you in finalizing your unit. Lastly, you showcase your unit to colleagues and then evaluate the course.

Activity 1 Supporting Your Assessment Plan

Step 1: Considering Resources that Will Support Your Assessment Plan

Review the assessment methods and instruments in the following table and compare them with the draft assessment methods you outlined in your Unit Plan. Identify which types of assessment instruments could support your unit.

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Assessment Method	Assessment Instruments
Strategies for Gauging Student Needs	
Graphic Organizers	Concept maps, sequencing activities, classification charts, prioritized lists
Know-Wonder-Learn (K-W-L) Charts	Topic on chart paper or electronic whiteboard, journals
Think-Pair-Share	Questions or prompts, forms for recording summaries and questions
Brainstorming	Topic on chart paper or electronic whiteboard
Strategies for Encouraging Self-Direction and Collaboration	
Project Plan	Checklists, prompts, forms
Self-Assessment and Reflection	Checklists, prompts
Peer Feedback	Checklists, scoring guides or rubric, prompts, forms
Observation of Cooperative Groups	Checklists, questions, reflections
Strategies for Monitoring Progress	
Informal Observations and Anecdotal Notes	Comments on sticky notes or computer labels collected in individual or group folders, checklists to help focus expected behaviors
Learning Logs	Forms, prompts
Progress Checklists	Checklists with milestones, due dates and approval stages
Progress Reports	Forms, prompts
Project Meetings and Conferences	Agendas, goals, and process forms
Strategies for Checking for Understanding and Encouraging Metacognition	
Written Journals	Prompts for journal entries, journal review plans
Video and Photojournals	Outlines of photo sequences and topics (shot lists), schedules for video scenes
Informal Questioning	Questions
Written and Oral Tests and Quizzes	Test and quiz questions

Assessment Method	Assessment Instruments
Strategies for Demonstrating Understanding and Skill	
Products	Rubrics, scoring guides
Performances	Rubrics, scoring guides
Portfolios	Checklists, rubrics, scoring guides, reflection questions
Student-Led Conferences	Forms, prompts

Step 2: Taking a Closer Look at Rubrics

Before deciding on the type of assessment you will create, consider the purposes of rubrics. Projects usually culminate with final products or performances. These demonstrations of learning are best assessed using rubrics that define *criteria* and have a scale of quality *indicators*. Rubrics are distinguished from other scoring tools, like checklists, because they outline levels of quality with *descriptors*. Descriptions of quality work at each level give students and teachers common language for expectations of final work. Rubrics can be reviewed and fine-tuned in discussions with students as the product or performance is assigned—this creates mutual understanding of expectations.

Rubrics contain criteria that define quality for many aspects or *traits* of a product or performance. Rubrics, however, are not always the best assessment choice. A checklist or scoring guide may be more appropriate. Generally, products or performances that are complex, have a lot of variation, or involve subjective judgments are good candidates for rubric scoring. The main goal of a rubric is to define levels of quality and publicize the expectations to students, parents, and others.

Higher-order thinking is difficult to define and equally challenging to assess. Rubrics are perhaps the best assessment tool to define and assess the complex thinking processes that are demonstrated in products and performances. The following rubric shows how the trait of analytical thinking is rated at four levels of quality. The trait is written fairly generically and could be used in a rubric in multiple content areas and topics.

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Trait or Criteria	Quality Descriptor Level 4	Quality Descriptor Level 3	Quality Descriptor Level 2	Quality Descriptor Level 1
Analysis of Evidence	Analysis shows sophisticated understanding of how evidence relates to and supports or opposes claim. Rationale of support/non-support reflects deep understanding.	Analysis shows basic understanding of how evidence supports or opposes the claim. Rationale of support/non-support may not reflect depth of understanding.	Analysis shows vague understanding of how evidence relates to the claim. Rationale of support/non-support reflects a superficial understanding.	Analysis shows no understanding of how evidence relates to the claim. Relationship is nonexistent or inconsistent. Rationale does not support rating.

Consider whether a rubric would best support your students in the development and assessment of their projects.

Note: More information on rubrics is available at:

www.intel.com/education/assessingprojects

Click **Assessment Strategies**, click **Demonstrating Understanding and Skill**, and then click **Rubrics and Scoring Guides**.

Notes:

Activity 2: Creating an Assessment

Step 1: Introducing the Assessing Projects Application

A variety of assessment instruments can assist with student assessment. *Assessing Projects*, one of the Intel® Education online productivity tools, aids teachers in both planning and creating effective assessments that align with the learning goals of their technology-enhanced units. The *Assessing Projects* application supports teachers in creating student-centered assessments that assess the difficult-to-measure skills and behaviors that are expressed in higher-order thinking.

The *Assessing Projects* application allows you to create three types of assessments:

- **Rubrics**—Rubrics are assessments that have a trait or collection of traits with specific criteria that clearly define, for both student and teacher, different levels of performance or product expectations.
- **Checklists**—Checklists are lists of items, steps, or elements needed for a task that are checked off as completed. Checklists are used by teachers for observation and analysis of student work and by students to monitor progress and self-assess.
- **Scoring Guides**—Scoring guides are assessments that have points attached to them and are used by teachers to assign a grade and by students to monitor progress and self-assess.

The *Assessing Projects* application provides access to a library of validated assessments. You can modify the assessments in the library to meet the needs of your particular project. The assessments can be printed or exported to a variety of formats.

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Heuristics—Problem-solving by trial and error: A method of solving a problem for which no formula exists, based on informal methods or experience, and employing a form of trial and error iteration (MSN Encarta*).

Step 2: Determining the Focus of Your Assessment(s)

Using the table below—and your own Habits of Learning Taxonomy—what higher-order thinking skills, products, performances, or processes do you want to target in this assessment? The categories below are the assessment categories included in the *Assessing Projects* library. Indicate which categories you are interested in including in your assessment(s).

Thinking Skills	Products/Performances	Processes
<input type="checkbox"/> Critical thinking	<input type="checkbox"/> Artistic/creative performances	<input type="checkbox"/> Collaboration
<input type="checkbox"/> Analysis	<input type="checkbox"/> Brochures	<input type="checkbox"/> Communication
<input type="checkbox"/> Commitment	<input type="checkbox"/> Constructions	<input type="checkbox"/> Peer review
<input type="checkbox"/> Evaluation	<input type="checkbox"/> Essays	<input type="checkbox"/> Reading
<input type="checkbox"/> Generalization	<input type="checkbox"/> Lab processes	<input type="checkbox"/> Research
<input type="checkbox"/> Inference	<input type="checkbox"/> Multimedia presentations	<input type="checkbox"/> Self-direction/ self-management
<input type="checkbox"/> Interpretation	<input type="checkbox"/> Newsletters	<input type="checkbox"/> Self-evaluation
<input type="checkbox"/> Problem solving	<input type="checkbox"/> Oral presentations	<input type="checkbox"/> Teamwork
<input type="checkbox"/> Argumentation	<input type="checkbox"/> Persuasive speaking	<input type="checkbox"/> Writing
<input type="checkbox"/> Coping with complexity	<input type="checkbox"/> Persuasive, expository, expressive, and narrative writing	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Decision making	<input type="checkbox"/> Reports	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Identifying and describing problems	<input type="checkbox"/> Simulations	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Knowledge of heuristics	<input type="checkbox"/> Skill demonstrations	
<input type="checkbox"/> Application of mathematical reasoning	<input type="checkbox"/> Timelines	
<input type="checkbox"/> Reasoning	<input type="checkbox"/> Videos	
<input type="checkbox"/> Creativity	<input type="checkbox"/> Web pages	
<input type="checkbox"/> Elaboration	<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Flexibility	<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Fluency	<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Risk-taking		
<input type="checkbox"/> Other: _____		
<input type="checkbox"/> Other: _____		
<input type="checkbox"/> Other: _____		

Step 3: Planning an Assessment

Plan an assessment based on your current Assessment Plan. Regardless of the type of assessment you choose to build, be sure to include the following elements for a quality assessment.

Foundation of an Assessment

- Language that clearly communicates the quality required
- Higher-order thinking skills (view your Habits of Learning Taxonomy for ideas)
- Criteria that are content-specific to your unit
- Instructions to the student (if a self- or peer-assessment)
- Room for feedback

Previewing the Steps for Creating an Assessment

1. Choose the type of assessment you want to create.
 - a. **Rubric:** If you want to build a rubric to assess a product or performance, the following will need to be completed:
 - i. Choose the traits to be assessed.
 - Categories specific to an assessment are located in the column on the far left side of the assessments. Example: In an oral presentation—eye contact, pace, expression, and so forth.
 - Define 6–8 traits or aspects of the product or performance that have a clear definition of quality.
 - Incorporate higher-order thinking skills.
 - ii. Decide the number of scoring levels.
 - In a rubric, different levels of performance or product expectations are noted by 4, 3, 2, 1 or excellent, good, fair, poor.
 - The default number of levels created by the *Assessing Projects* application is four.
 - iii. Develop descriptors for each trait at each scoring level.
 - Criteria are standards, measures, or expectations on which a judgment or decision can be based.
 - The more specific the criteria, the easier students can determine the quality of their work.
 - Criteria should support targeted

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b. **Another Assessment:** If you want to create a different type of assessment than a rubric, such as a scoring guide or checklist, be sure to still include the elements identified as the foundation of an assessment.

2. To help focus on your assessment purpose, think about the following questions:

- What concepts, skills, and knowledge will be assessed?

- How will the Curriculum-Framing Questions be assessed?

- What higher-order thinking skills will be assessed?

- What 21st century skills will be assessed?

- At what level should your students be performing all of the identified learning goals?

- What kind of assessment will best suit you and your students' needs?

- Checklist
- Rubric
- Scoring guide

Step 4: Using the Assessing Projects Application to Create an Assessment

In this step, you examine sample assessments in the *Assessing Projects* application that you can adapt for your unit. You can use the application to either create a new assessment or edit an existing sample assessment to match your purposes. The application allows you to select specific skills from an assessment and edit the traits and descriptors.

Traits are the terms identified in the left hand column. They describe the measurable objectives of performance, behavior, or quality. *Descriptors* describe the performance for each trait at several levels. In the self-direction rubric examples below, four levels of the Sets Goals trait might look like this:

Trait	Ratings			
	4	3	2	1
Sets Goals	Sets challenging, achievable goals. Identifies and accesses the resources necessary to achieve goals.	Sets achievable goals. Identifies and accesses some resources necessary to achieve goals.	Sets unrealistic goals. Identifies but does not access some resources necessary to achieve goals.	Begins the task without setting goals. Does not identify any resources.
	Descriptors			



As you review the traits and descriptors in the sample assessments, be sure to adapt them for your own purposes before applying any of them to your summative assessment.

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Completing the following steps will help you as you create or adapt an assessment (Airasian, 1991):

1. Perform the task yourself (for example, create a student sample) so you can identify the traits that should be assessed.
2. Make sure the traits you identify meet your targeted goals.
3. Limit the number of traits, so they can all be observed during a student's performance or assessed from a product.
4. If possible, have colleagues and students help you think through the important traits included in the performance or product.
5. Write descriptors in terms of observable student behaviors or product characteristics in student-friendly language.
6. Avoid the use of ambiguous words that cloud the meaning of the descriptors.
7. Consider the order of your traits and make sure the order reflects your priorities.

Using the Assessing Projects Application

Keeping the preceding steps in mind, create an assessment for your unit using the *Assessing Projects* application. Use the Intel® Education *Help Guide* if you need assistance in completing any technology skills identified below.



1. Go to *Assessing Projects*: www.intel.com/education/AssessingProjects
2. Review the Try It section:
 - a. Click **Try It**.
 - b. View the **Demo**. (See Teaching Tools, Assessing Projects Application Skill 4.1.)
 - c. Go through the **Tutorial** if you need further instruction.
 - d. From either the Demo or Tutorial section, click the **Workspace** tab and log on to the Teacher Workspace. (See Teaching Tools, Assessing Projects Application Skill 4.2.)
3. Create an assessment to support your unit. Consider the following as you create your assessment:
 - If you want to browse sample assessments for ideas, search the Library categories. (See Teaching Tools, Assessing Projects Application Skill 4.3.)



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

- Assessing Projects Application Skill 4.1: Learning about Assessing Projects
- Assessing Projects Application Skill 4.2: Logging In
- Assessing Projects Application Skill 4.3: Browsing the Assessment Library

Note: Review the categories you identified on page 11.06 as important elements to assess. You can search for assessments that specifically target those areas.

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- If you already have the content you want to include in the assessment and do not need additional content from the *Assessing Projects* Library, create a new assessment from scratch. (See Teaching Tools, Assessing Projects Application Skill 4.33.)
- You can use content from an existing assessment in the library to create your own assessment. Search and save an assessment from the library into your workspace so you can edit the assessment. (See Teaching Tools, Assessing Projects Application Skills 4.13, 4.22, and 4.6.)

Note: You may want to create a specific folder to save the assessment in your workspace to help organize your assessments. Consider creating a folder that references the unit you are creating (such as *Romeo and Juliet*), subject area it targets (such as language arts), type of assessment (such as Rubrics), class (such as English 1), and so forth. (See Teaching Tools, Assessing Projects Application Skills 4.9 and 4.12.)

- You can browse multiple assessments and pick and choose traits or items from each of the assessments to use in your own assessment. (See Teaching Tools, Assessing Projects Application Skill 4.37.)
- Edit the assessment's content or format to conform to your needs. Make changes such as:
 - Adding or deleting columns or rows (ratings and traits) (See Teaching Tools, Assessing Projects Application Skills 4.26, 4.27, 4.29, 4.30.)
 - Reordering traits (rows) or ratings (columns) (See Teaching Tools, Assessing Projects Application Skills 4.25 and 4.28.)
 - Changing rating levels from numbers to words such as *Excellent*, *Good*, *Satisfactory*, *Developing*, and so forth or changing rating levels to points possible (to create a scoring guide) (See Teaching Tools, Assessing Projects Application Skill 4.24.)
 - Modifying assessment title, instructions, and descriptors to make them specific to a particular unit and appropriate for the age group. (See Teaching Tools, Assessing Projects Application Skills 4.17, 4.20, and 4.24.)



4. When you finish editing, save the assessment. (See Teaching Tools, Assessing Projects Application Skills 4.31 and 4.32.)
5. Export your assessment in the desired format (word processing or spreadsheet) and save it into your Project Folder. (See Teaching Tools, Assessing Projects Application Skill 4.38 and 4.39.)

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

- Assessing Projects Application Skill 4.6: Copying an assessment into your Personal Library
- Assessing Projects Application Skill 4.9: Creating a Personal Library folder and subfolder
- Assessing Projects Application Skill 4.12: Organizing assessments in your Personal Library
- Assessing Projects Application Skill 4.13: Searching for assessments
- Assessing Projects Application Skill 4.17: Editing an assessment title
- Assessing Projects Application Skill 4.20: Editing instructions
- Assessing Projects Application Skill 4.22: Conducting a Quick Search
- Assessing Projects Application Skill 4.24: Editing traits, descriptors, ratings, and items
- Assessing Projects Application Skill 4.25: Moving a row
- Assessing Projects Application Skill 4.26: Adding a row
- Assessing Projects Application Skill 4.27: Deleting a row
- Assessing Projects Application Skill 4.28: Moving a column
- Assessing Projects Application Skill 4.29: Adding a column
- Assessing Projects Application Skill 4.30: Deleting a column
- Assessing Projects Application Skill 4.31: Saving a modified assessment

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

- Assessing Projects Application Skill 4.32: Saving a modified assessment with a different name
- Assessing Projects Application Skill 4.33: Creating an assessment from scratch
- Assessing Projects Application Skill 4.38: Exporting an assessment as a word processing document
- Assessing Projects Application Skill 4.39: Exporting an assessment as a spreadsheet
- Assessing Projects Application Skill 4.37 Combining traits from multiple assessments into a single assessment
- Word Processing Group 3: Changing the Look of Your Words
- Word Processing Group 7: Working with Tables
- Spreadsheets Group 5: Changing the Look of Information and Worksheets
- Spreadsheets Group 6: Organizing Information
- Assessing Projects Application Skill 4.8: Deleting an assessment from your Personal Library

6. Edit the exported assessment as needed.

- If you exported as a word processing document:
 - You may change the appearance of your text. (See Word Processing Group 3.)
 - You may format your assessment by adding background colors, merging or splitting cells, rearranging columns or rows, resizing columns or rows, or adding or deleting columns or rows. (See Word Processing Group 7.)
- If you exported as a spreadsheet:
 - You may change the appearance of your text and background. (See Spreadsheets Group 5.)
 - You may format your assessment by rearranging columns or rows, resizing columns or rows, or adding or deleting columns or rows. (See Spreadsheets Group 6.)

7. Delete any assessments that you will not be using. (See Teaching Tools, Assessing Projects Application Skill 4.8.)

Optional: If you have time, create any other assessments identified in your Assessment Plan. (See Extension Activity on page 11.29.) You may find relevant examples for additional assessments as you browse the library, so be sure to add assessments of interest to your online workspace for later use.

Activity 3: Finalizing Your Assessment Plan

The following questions are provided to help you think through and edit your Assessment Plan. If desired, you may simply review the questions and then open your Unit Plan to finalize your Assessment Plan.

- 1. What methods will you use to gauge student readiness for the unit?

- 2. What reporting and monitoring methods will you use to encourage student self-management and progress during independent and group work?

- 3. How will you monitor student understanding and adjust if necessary?

- 4. How will you help your students reflect on their learning (metacognition)?

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5. What product(s) or performance task(s) will engage your students and best demonstrate your intended learning goals and targeted thinking skills?

6. What methods will you use to assess final understanding and demonstration of learning? What will quality look like?

7. In what ways will you address and assess higher-order thinking in this unit?

8. If you chose to draft your ideas by writing your notes on these pages, open your Unit Plan now and revise your Assessment Plan.

Note: For additional samples of assessment timelines and summaries, see examples starting on Appendix D.



9. Save your work.



Note: You may also want to review the assessment strategies available at:

www.intel.com/education/assessingprojects

Click **Assessment Strategies**, and then select a category of interest.

Activity 4: Reflecting on Your Unit

Now is the time to take a critical look at your unit, noting any necessary revisions. Look at your unit and evaluate whether it supports the complexities of the concepts students will be studying. Additionally, consider whether the students' use of the online thinking tool supports and begins to provide answers for the Essential and Unit Questions. Use the Reflection Checklist below and the Project Rubric on pages 11.25 and 11.26 to help guide your evaluation process.

Unit Reflection Checklist

Checklist	Comments
<div style="display: flex;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); background-color: #e0e0e0; padding: 5px; font-weight: bold; margin-right: 10px;">Overall Unit</div> <div> <ul style="list-style-type: none"> <input type="checkbox"/> The unit, as a whole, investigates an open-ended, complex problem, system, or idea. <input type="checkbox"/> The unit contains authentic applications outside of the classroom. <input type="checkbox"/> Unit goals are in alignment with and support curricular standards and the Curriculum-Framing Questions. <input type="checkbox"/> From the knowledge gained by developing ideas with the thinking tools, students conduct additional research. From this research, they make further plans of action, decisions, or conclusions to answer the larger questions of the unit. <input type="checkbox"/> Activities in the unit require students to use higher-order thinking skills—apply, analyze, synthesize, and/or evaluate information. <input type="checkbox"/> Multiple authentic assessment strategies are incorporated into the unit. </div> </div>	



Note: This checklist is available in the *Unit Assessment* folder on the Curriculum Resource CD.

Notes:

Activity 5: Completing Your Unit Plan

Step 1: Finalizing Your Unit Ideas

Use the following questions to help you develop ideas for the Instructional Procedures section of your Unit Plan. These directions will help guide your implementation plans for any project that uses an online thinking tool.

1. What activities will introduce the project to students? How will students develop the knowledge-level understanding they will need for the higher-order thinking in the project? What activities will help students draw on prior knowledge and skills for the project?

2. Based on the reflections in the previous modules, which thinking tools best target the learning objectives in your unit? Which tools will you actually use in this unit? How does the tool (or tools) specifically support student learning and higher-order thinking in this unit?

3. When using the thinking tools, thinking becomes not only visible, but discussible. Think about the best configuration for your students to ensure each group member is actively involved in discussions and contributing to the decision-making process. How will you organize and monitor groups? What ground rules will you establish? What roles will be established?

4. How will you ensure that student teams have sufficient time and access to work on their rankings, maps, or cases and conduct Internet research? How will you schedule computer time? How will you ensure equal access?

5. Think about the overall scope and sequence of your unit. Where in your unit will the thinking tools be most beneficial? What will the cycle of revision and reflection look like? How many opportunities will students have to revise their ideas? What reflection activities will be built into the project? How much time will students have for research activities? What resources will they use?

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6. Will you include any outside participation in this project? Describe how you could incorporate participation from others outside the classroom, including guest speakers, mentors, other students, community members, parents, and so forth.

7. The end result of this project is for students to be able to communicate their conclusions and analyses of a problem or system, which will be based—in part—on their use of the thinking tool(s). How will students develop and present answers to the other significant questions and issues of the unit? What will be the final project, outcome, or presentation?

8. How are the Curriculum-Framing Questions answered by the end of the unit?

9. How will you accommodate the different learners in your classroom? What accommodations will you need to make so that all students can be successful?




Note: You may also want to review the section on differentiated instruction and assessment available at: www.intel.com/education/assessingprojects

Click **Overview and Benefits**, and then click **Formative Assessment**.

Step 2: Revisiting Your Unit Plan

Using the implementation ideas from the previous step, revise your Unit Plan. Be sure to include a clear explanation of the instructional cycle.

1. Open your Unit Plan.
-  2. Remove information for any thinking tool that you will not be including in your Unit Plan. You can simply delete the text or delete the rows of the table. (See Word Processing Skill 2.3 or 7.6.)



Note: If you want to keep a copy of the project details for the tool that you are deleting from your Unit Plan, you may copy the information into the appropriate Project Idea document located in the *Thinking Tool* folder, applicable tool subfolder on the Curriculum Resource CD.

3. Revise any of the previously edited sections, if necessary.
4. Using the information from the previous pages, edit the Procedures section. Summarize the activities that will occur in the classroom that lead up to, include, and follow the use of the online thinking tools and assessments. Include any cyclical learning that will occur. You may want to include the following:
 - a. Overview or introduction of the project to your students
 - b. Project management ideas, such as:
 - How student teams will be formed and organized
 - How student teams will be provided with Internet access
 - Inquiry questions you may ask the students
 - c. Student activities or tasks, such as:
 - Student pre-planning activities (such as brainstorming, discussion)
 - Hands-on activities
 - Research process
 - Reflection activities
 - Ongoing assessment by peers, the teacher, or themselves
5. Complete the **Materials and Resources** section.
6. Review all other sections of your Unit Plan and, if needed, modify or complete them.



7. Save your work.

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

- Word Processing Skill 2.3: To erase or delete words or text
- Word Processing Skill 7.6: To remove or delete a row or many rows


Activity 6: Showcasing Your Unit

During this activity, think about the benefits of showcasing student projects, consider how you can manage a project showcase in your classroom, and prepare your unit for a showcase with your colleagues.

Step 1: Considering Showcase Options for Student Projects

You can use events like a showcase to allow the greater community to provide input to your students and to celebrate your students' achievements. When students realize that a wider audience than just their teachers and peers will view their work, they tend to invest more time in product development, often resulting in higher quality projects.

Showcasing products created with technology tools often demands different methods of facilitation than showcasing products created without technology. Some ideas for showcasing projects include:

- **Small Group:** Create small groups of four or five. Give students time to share their projects with the small group, and allow additional time for group members to provide written feedback.
- **Rotation Stations:** Have half of the students stand at their computers, while the other half, and any other observers, rotate and give feedback. Then, have the two groups switch. Follow this activity with a full group discussion.
- **Whole Group:** Allow each student to use a projection device to present his or her project to the whole class.
-  **Pair and Share:** Use some method to pair students for sharing. Follow the pair and share with a whole class discussion. View the Activities for Pairing Students document in the *Showcase* folder of the Curriculum Resource CD for additional ideas on how to pair students.
- **Virtual Showcase:** Have students upload their products to a wiki. Peers can provide feedback by filling out printed forms, uploading files to the presenter's wiki, or creating new subpages in the wiki for comments.

Step 2: Preparing for the Showcase

You have the option of using a wiki to showcase your unit. Facilitating a showcase through a wiki means that the files are easily accessible to participants and observers during and after the showcase. If students use online thinking tools, a wiki makes accessing the projects easier. If you decide not to use a wiki, use this time to organize your files and open your student sample thinking tool project.



1. Go to your wiki site and log on.
2. Create a new subpage for your showcase.
 - a. Add a title for your page starting with your first name (for example, Claire's Showcase).
 - b. Include the following details on your wiki page.



Note: You can copy and paste most of these items from your Unit Plan. (See Word Processing Skill 2.6 and 2.8.)

- Your Unit Plan's title
 - A brief summary
 - Your Curriculum-Framing Questions
 - An active link to the thinking tools login page (<http://educate.intel.com/workspace/student/login.aspx?LID=en>)
- c. Upload the following files for your showcase. (You may want to rename the files, or provide a description, so they are clearly identified for your reviewers.)
 - Unit Plan
 - Assessment(s)
 - Any other documents you would like to share



Note: You may be able to upload your Unit Plan with the other files embedded in it if the overall file size is not too large. (See Word Processing Skill 10.7.)

3. You have several options for collecting feedback as you present your Unit Portfolio. Your colleagues can:
 - a. Provide feedback on a subpage of your wiki
 - b. Upload completed Showcase Feedback Forms to your wiki
 - c. Fill out printed Showcase Feedback Forms by hand

If you have problems accessing or using the wiki, you can create a presentation to showcase your unit.

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

- Word Processing Skill 2.6: To copy words or text
- Word Processing Skill 2.8: To paste words or text in a new place
- Word Processing Skill 10.7: To insert another document as an object

If you or your facilitator chooses to use printed feedback forms for the showcase, these forms need to be printed ahead of time. The Showcase Feedback Form is available in the *Showcase* folder on the Curriculum Resource CD.

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Step 3: Showcasing Your Unit

The goal of this showcase is to share your final products with your colleagues and to see their units. You also give and receive feedback about the highlights of your unit and areas in which you can improve.



Begin your showcase by sharing a brief summary of your unit. When sharing your sample thinking tool project, first share the assessment and then present your sample to help your audience better understand and identify the learning objectives. Be sure to leave time at the end of your presentation for questions and feedback from your audience.

Follow these guidelines to ensure a successful showcase experience.

Presenting at the Showcase

- Share the general information for your unit (grade level, subject area, and so on) and provide a brief summary of the unit.
- Highlight your unit's Curriculum-Framing Questions as well as your unit's targeted standards and objectives.
- Share your Assessment Plan and any assessments you created.
- Present your student sample project(s) or provide the student sample login information to your reviewers so they can access your thinking tool project(s).
- Use the Project Rubric and Showcase Feedback Form on the following pages to help facilitate feedback.
- Be sure to leave time at the end of your presentation for questions and feedback from your audience.

Providing Feedback at the Showcase



- Use the prompts on the Showcase Feedback Form (located in the *Showcase* folder on the Curriculum Resource CD) to guide your discussions. Focus on content, not just the technology.
- Ask questions.
- Provide both positive feedback and specific suggestions on how to enhance the unit and student learning.
- Provide concrete examples in your comments—give specific examples of what is effective or specific ideas of how an area could be enhanced.
- Even if all participants do not have completely finished Unit Portfolios, the feedback process is important and will still be valuable.

Completing Your Unit

When providing feedback to a wiki showcase, you can use one of the following methods:

- Record your thoughts on a subpage in the presenter’s wiki:
 1. Create a subpage with your name in the title (such as, Michael’s Feedback).
 2. Copy the text from the Showcase Feedback Form (located in the *Showcase* folder on the Curriculum Resource CD) as a prompt.
 3. Paste the text into your subpage.
 4. Record your thoughts on the wiki subpage in response to the prompt.

- Type your feedback into the Showcase Feedback Form document and then upload it to the presenter’s wiki:
 1. Open the Showcase Feedback form located in the *Showcase* folder on the Curriculum Resource CD.
 2. After you record your feedback, save the form as a new file with a unique name. Be sure to include your name in the filename (such as, Michael’s Feedback).
 3. Upload the document to the presenter’s wiki.

Note: If editing and uploading to the same page, participants must take turns uploading feedback forms.

Following the showcase, list ideas for revising your unit.



Completing Your Unit

Showcase Feedback Form

Component	Comments
Overall Unit Concept	Highlights
	Ideas for Improvement
Integration of Technology	Highlights
	Ideas for Improvement
Project Approach to Learning	Highlights
	Ideas for Improvement
Assessment	Highlights
	Ideas for Improvement



Note: This form is available in the *Showcase* folder on the Curriculum Resource CD.

Completing Your Unit

4	3	2	1
Instructional design addresses standards and objectives.			
My Unit Plan clearly shows how the work my students do will help them meet the standards and objectives.	My Unit Plan shows how the work my students do will help them meet the standards and objectives.	My Unit Plan shows that some of the work students do addresses standards and objectives.	My Unit Plan shows that very little of the work students do addresses standards and objectives.
Instructional design addresses 21st century skills.			
In my Unit Plan, I provide instruction, modeling, and multiple opportunities for students to refine and develop relevant 21st century skills.	In my Unit Plan, I provide instruction and modeling to help students refine and develop relevant 21st century skills.	Students practice 21st century skills during the unit, but they receive little instruction to support their development of these skills.	Students rarely use 21st century skills during the unit.
Instructional design incorporates Curriculum-Framing Questions (CFQs).			
My unit integrates CFQs to focus student learning on important concepts and big ideas throughout the unit.	My unit uses CFQs to focus student learning on important concepts and big ideas multiple times in the unit.	The use of CFQs in my unit is superficial because they are not used to focus student learning.	My unit does not address CFQs.
Instructional design uses project approaches.			
In my unit, students have many choices about how they demonstrate their learning. They create authentic products and performances developed through connected tasks and activities.	In my unit, students have some choices about how they demonstrate their learning. They create products and performances developed through connected tasks and activities.	In my unit, students have few choices about how they demonstrate their learning. They complete discrete activities that do not connect to final products or performances.	My students do not demonstrate their learning through products or performances.
Instructional design addresses student differences.			
My unit provides well-defined and thoughtful accommodations to support diverse learners.	My unit provides accommodations to support diverse learners.	My unit provides minimal accommodations to support diverse learners.	My unit does not provide any accommodations to support diverse learners.
Technology integration supports content learning.			
In my unit, students use technology to enhance conceptual understanding and develop content specific skills and strategies.	In my unit, my students use technology to understand important content concepts and develop content specific skills.	In my unit, my students use technology to explore content concepts.	In my unit, my students' use of technology is superficially related to content.
Thinking Tools support 21st century skills.			
The use of thinking tool(s) creatively develops students' research, higher-order thinking, collaboration, and communication skills.	The use of thinking tool(s) develops students' research, higher-order thinking, and/or communication skills.	The use of the thinking tool(s) only moderately develops students' research, higher-order thinking, collaboration, or communication skills.	The use of the thinking tool(s) does not develop students' research, higher-order thinking, collaboration, or communication skills.

(Continued)

Module 11

Completing Your Unit

4	3	2	1
Technology integration meets student and classroom needs.			
In my unit, my students use technology that is appropriate for all ability levels and interests, providing challenging experiences that build technology proficiency.	In my unit, my students usually use technology that is age appropriate and meets the needs of diverse learners.	In my unit, my students occasionally use technology that is age appropriate.	In my unit, my students seldom use technology, and when they do use it, the technology is often inappropriate for their ability levels or interests.
The technology used in my unit is reasonable and feasible given the specific circumstances of my teaching situation.	The technology used in my unit is reasonable although somewhat difficult given the specific circumstances of my teaching.	The technology used in my unit takes a great deal of effort on my part.	Given the specific circumstances of my teaching situation, the technology used in my unit is not feasible.
Assessment strategies address standards and objectives.			
My assessments clearly and thoroughly address all targeted standards and learning objectives, emphasizing content and processes over traits such as organization and appearance.	My assessments address all targeted standards and learning objectives and emphasize content learning.	My assessments address some targeted standards and learning objectives.	My assessments address few targeted standards and learning objectives.
Assessment strategies are student-centered.			
In my unit, students contribute to the creation of assessments and frequently assess themselves and peers.	In my unit, students may contribute to the creation of assessments and assess themselves and peers.	In my unit, students may assess themselves and peers.	In my unit, students have little or no involvement in their assessment process.
The assessments in my unit have specific criteria that define quality. My assessments make it easy for students to measure their work against expectations.	The assessments in my unit have criteria that define quality. Students can use my assessments to measure their work against expectations.	The assessments in my unit lack clear criteria for my students to measure their work.	Students cannot use my assessments to measure their work.
Assessment strategies are varied and ongoing.			
In my unit, a variety of informal and formal methods are used throughout the instructional cycle to meet all five assessment purposes.	In my unit, informal and formal methods are used throughout the instructional cycle to meet most of the five assessment purposes.	In my unit students are assessed infrequently and in traditional ways to meet some assessment purposes.	Students are assessed in traditional ways at the end of the unit.

Activity 7: Reflecting on the Course

During this activity, you reflect on the course and share your impressions, ideas for improvement, and overall assessment.

Step 1: Evaluating the Course

The online evaluation is part of an external evaluation of the Intel® Teach Thinking with Technology Course. The survey is designed to collect information about your experience and how prepared you feel to integrate technology-related activities in your classroom.

The survey should take less than 15 minutes to complete. The data will be used in statistical summaries, and individuals will not be identified.



1. Log on to the Intel® Teach Thinking with Technology Course evaluation site at: www.intel.com/education/teachfuture/eval
2. Enter your **Class ID** number and your Master Teacher's **UserID**, and then click **login**.
3. Read the introductory letter, and then click **Begin Evaluation** at the bottom of the page.
4. Answer the questions by selecting buttons or typing in text boxes. Continue to the next page by clicking the **Next** button at the bottom of each page.
Note: The evaluation consists of several pages. You will not be able to click the **Back** button to modify your answers.
5. When you have completed the evaluation, click the **Finish** button.

Your facilitator will provide you with the Class ID and UserID. This login information is available from the class details on the Extranet.

Completing Your Unit

Step 2: Reflecting on Lessons Learned

If you are using a wiki, create a final entry to reflect on and share impressions about using thinking tools with students, the usefulness of the *Assessing Projects* resource, and what you have learned from this course. If you are not using a wiki, discuss your thoughts in a large group discussion.



1. Go to the wiki site for this course and log on.
2. Create a new entry on your wiki page and use the following questions to help you reflect on your use of the online thinking tools.
 - What other classroom projects could benefit from the use of the online thinking tools?
 - How will the ideas and skills learned from this course affect your teaching practices?
 - Of everything you learned, what do you think will have the biggest impact on student learning?
 - What did you find most valuable about the course?



Note: You may want to review the *Benefits of Thinking Tools* available at:
www.intel.com/education/tools/benefits.htm



3. Save your wiki page.



4. Share your thoughts with the class.

Extension Activity: Enhancing Assessment in Your Unit

The following activities and resources are available to you as a self-study course enhancement or an optional extension in your course.

Use the resources in *Assessing Projects* to learn more about integrating ongoing assessment in your unit. Continue your work using the *Assessing Projects* application to enhance or complete the assessment you started in Activity 2 or to create an additional assessment for your unit.



1. Go to: www.intel.com/education/assessingprojects
2. Click **Assessment Plans** and select either **Elementary** or **Secondary Assessment Plans**.
3. Browse the assessment plans for additional ideas for incorporating ongoing assessment in your unit.
4. Click **Workspace** and log on with your Teacher login information.
5. Revise your existing assessment or create a new assessment using the resources in the library.

References

Airasian, P. W. (1991). *Classroom assessment*. New York: McGraw-Hill.

Heuristics. *Encarta World English Dictionary* (North American Edition). (2007). Redmond, WA: Microsoft Corporation. Retrieved from <http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861617730>

Module 11 Summary

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

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

Module 11 Key Points:

- Some common assessments used in a project approach to learning are rubrics, scoring guides, and checklists.
- Rubrics are distinguished from other scoring tools, like checklists, because they outline levels of quality with descriptors.
- The main goal of a rubric is to define levels of quality and “publicize” these expectations to students, parents, and others.
- You can use events like a showcase to allow the greater community to provide input to your students and to celebrate their achievements.

Accomplishments:

- Completed my Assessment Plan and created one or more assessments using the *Assessing Projects* application
- Completed a Unit Plan that integrates *Visual Ranking*, *Seeing Reason*, and/or *Showing Evidence* tools
- Showcased my Unit Plan, assessment tool(s), and student sample project(s)
- Received and provided feedback on my showcased unit
- Completed the Intel® Teach Thinking with Technology Course!

