Pair and Share

Share: Student sample and assessment

Activities

Discuss: Learning styles
View: Resources and ideas for accommodating students with special needs

Discuss: Case studies on using assessment to support self-direction
Create: Assessment to encourage student self-direction

Discuss: How you will help your students become self-directed learners

Explore: Various kinds of student support materials
Create: A student support resource

Review: Unit Plan
Revise: Unit Plan to accommodate all learners

Review: Key points of the module
Create: A blog entry that reflects on your learning

Planning for Student Success

Planning Ahead

Review:	Differentiation with technology practice
Explore:	Ideas for teacher support materials
Plan:	Facilitation materials for your unit

Module 6
Planning for Student Success

Description: In the previous modules, you have taken on the role of a student to create a student sample and the familiar role of a teacher to create an assessment for your sample. During this activity, you share your assessment strategies, your student sample assessment, and your student sample, with your Pair and Share group. The feedback you receive may help you improve your sample and your assessment strategies.

Pair and Share: Sharing Student Samples and Assessments

During this activity, you share the student sample and assessment you created in Modules 4 and 5, along with your Unit Plan, with your group.

Note: You may wish to e-mail your student sample, your assessment, and your Unit Plan, to your group members, upload them to a wiki, or attach them to your blog so that your everyone's work is all available on one computer.

1. Make sure your student sample and student sample assessment are ready to share.

2. Explain how the student sample, assessment, learning objectives, and outcomes align with each other.

3. Review and give feedback to your group members on their assessment strategies. Consider the alignment between the student sample, assessment, and learning goals. Refer to the Unit Plan for context. When reviewing, use the Portfolio Rubric in the *Assessments* folder on the Curriculum Resource CD and in the Appendix on page A.05 as a guide. As a guide, follow the 3-2-1 strategy:

    ▪ Ask three questions.

    ▪ Make two comments.

    ▪ Provide one suggestion.

4. List ideas for modifying your student sample and assessment:

    _____

    _____

    _____

    _____

Planning for Student Success

Activity 1: Creating Accommodations for All Learners

Teachers want all students to meet standards and objectives and reach their learning potential. The assessment plan you created gives you and your students important information about their learning. Students also have differences based on interests, personality, and preferred learning modalities. In this activity, you look at how the students in your classroom differ from each other and you think of ways in which all students can successfully participate in your unit.

When students' needs are met in the classroom, they have better attitudes and better test scores (Cotton, 1998). All students need some accommodation or individualized support. The information that teachers gain from formative assessment helps them design instruction that meets the needs of all their students. Students also need environments that allow them to use their strengths and interests to build their knowledge and skills.

Tomlinson (2000) lists four ways in which teachers can differentiate instruction:

- **Content—**Adjust what students need to learn or how they get the information they need.

- **Process—**Recommend different ways of approaching the content.

- **Products—**Allow students to rehearse, apply, and extend what they have learned in a variety of ways.

- **Learning Environment—**Create a flexible classroom with quiet places and areas for interaction, and teach routines that create independence.

Step 1: Considering Different Learning Modalities

Psychologists and educators have developed several frameworks for describing various ways in which students learn, such as visual-auditory-kinesthetic, left brain/right brain, and multiple intelligences. Work with a group to explore various learning modalities.

1:1 Tip: Individual computers often allow students to choose a method of receiving and using information that meets their learning styles. Students can use text readers, music, video, and simulations to learn new information. They can also use a variety of technology tools to demonstrate their learning.

1. Break into groups of three members each. Have each member in the group read and report on a different framework for understanding learning styles:

   - Visual-auditory-kinesthetic

   - Left brain/right brain

   - Multiple intelligences

2. Go to the Intel® Education *Designing Effective Projects* resource:

    a. Go to: **www.intel.com/education/DesignProjects**

    b. Click **Thinking Skills**.

    c. Click **Thinking Frameworks**.

    d. Click **Learning Styles**.

    e. Read about your assigned learning style. (You may need to click **Next** at the bottom of the page to find your learning style framework.)

3. Read the information in your framework and summarize it for your group. Discuss your thoughts about how this particular look at learning styles could have an impact on how you meet students' needs in your unit:

- Visual-auditory-kinesthetic

- Left brain/right brain

- Multiple intelligences

Planning for Student Success

Step 2: Differentiating for Student Learning

Providing for students with a range of learning abilities and nonnative language speakers in the regular classroom offers unique challenges for teachers. At the same time, instructional accommodations to support diverse needs can provide rich learning experiences for all students.

1:1 Tip: Individual computers provide for differentiated learning:

- They allow students with special needs to access tailored tasks and information, communicate easily with people who can help them, and take advantage of adaptive equipment and software.

- Nonnative language speakers can often access information in their native language, allowing them to continue their content learning while they learn the mainstream language.

- Gifted and talented students are not limited to the classroom materials designed for their grade-level peers. They have access to information and tools to meet their goals, interests, and abilities.

Meeting the needs of all students requires careful preparation and planning in unit design. All students need the right amount of scaffolding so that they feel confident and comfortable taking risks, and are working to become independent learners. Students with learning difficulties, nonnative language speakers, and students with exceptional abilities need different kinds of support. Some of this differentiation of support can be met with technology. Review the materials in the *Differentiation* folder on the Curriculum Resource CD for accommodating the needs of all learners. Note how you might include some of those strategies in your unit:

_____

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1. Open your Unit Plan.

2. Write a draft of the strategies you will use in the Accommodations for Differentiated Instruction section.

Optional: An optional Differentiation Survey is available that can help you self-assess ways you are already differentiating in your classroom. This self-assessment may assist you in the completion of this activity. Open the survey in the *Differentiation* folder on the Curriculum Resource CD.

Activity 2: Supporting Student Self-Direction

In student-centered classrooms, students are not always under the direct supervision of a teacher. To successfully manage their own learning, students need to be self-directed learners. Self-direction is an important lifelong learning goal for students of all ability levels. This 21st century skill is critical for success in school, life, and work. Students who understand the ways in which they learn are more adept at using appropriate strategies to complete tasks successfully. Self-direction skills help students with special needs complete tasks successfully and independently at a level that challenges them to reach their potential.

During this activity, you explore a number of ways to use formative assessment to help all students, especially those with special needs, become independent learners.

Step 1: Thinking about Formative Assessments to Enhance Self-Direction

Unlike summative assessment, which occurs at the end of a unit or project to inform teachers and students about how successfully unit objectives have been achieved, formative assessment takes place throughout a project in formal and informal ways. Formative assessment is most effective when:

- Students are given a clear picture of what they need to learn.

- Students receive continuous feedback about their progress related to learning goals.

- Students self-assess their own progress.

- Teachers provide instruction in the specific steps students must take to be successful (Black & Wiliam, 1998).

The impact of implementing formative assessment on student learning cannot be over-stated. In 1998, Black and Wiliam reviewed 21 research studies and approximately 580 articles or chapters on the impact of formative assessment on student achievement. They found that "innovations that include strengthening the practice of formative assessment produce significant and often substantial learning gains" (p. 9). Although this kind of assessment improves the learning of all students from kindergartners to college students (Black et al., 2003), studies show that low achievers who need the extra help benefit the most (Black & Wiliam, 1998).

In student-centered classrooms, teachers assess students, students assess each other, but, ultimately, students assess themselves. When students assess their own thinking processes and the products they create, they are doing more than just looking for errors. They are, as Wiggins (1990) explains, "internaliz[ing] the standards by which their products and performances will be judged." This ability empowers them to think about the

1:1 Tip: Research suggests that students in one-to-one classrooms have improved organizational skills. Assist students in the development of these skills by teaching them how to use the computer resources to track and monitor their own progress (Jackson, 2004).

quality of their work and their working processes in concrete ways and enables them to modify their learning strategies to become more efficient and effective learners.

1. Read more about the role of Formative Assessment in supporting student self-direction in the *Assessment* folder of the Curriculum Resource CD.

2. Open the *Assessing Projects* resource at:
   www.intel.com/education/AssessingProjects

3. Click **Overview and Benefits**.

4. Click **Formative Assessment**.

5. Review one of the case studies in the second highlight box on the right.

6. Either download the document and save it in your *course_resources* folder of your Portfolio folder or use a tagging or bookmarking site to highlight or make comments directly on the Web page.

   a. Highlight the assessments that you find in the case study you selected.

   b. Insert comments including questions, connections to your own experiences, and ideas you might like to try in your own classroom.

7. Discuss a few of your comments with a partner.

Step 2: Creating an Assessment to Foster Self-Direction

Create an assessment that helps students take more control of their learning, such as one that supports self-direction, self-management, self-assessment, or reflection. If desired, click **Try It** in the Intel® Education *Assessing Projects* application and click **Demo** to review some of the application's features. You cannot save or modify assessments from the demo. Choose from the following options:

Option 1: Creating or modifying an assessment from *Assessing Projects* (page 6.06)

Option 2: Modifying an assessment from the Assessment Strategies section of *Assessing Projects* (page 6.07)

Option 3: Creating an assessment using word processing software (page 6.07)

Option 1: Creating or Modifying an Assessment from Assessing Projects

1. Go to *Assessing Projects:* **www.intel.com/education/AssessingProjects**

2. Sign into the Workspace.

   Note: You previously set up a teacher workspace on the Intel Education Web site. You can find your Teacher ID and password on your Login Information document saved in your *course_resources* folder.

3. Use the *Assessing Projects* application to create or modify a self-direction assessment. Refer to the Teaching Tools Group 4 area of the *Help Guide* as needed to search assessments, modify or copy traits, and export assessment to your Unit Portfolio folder.

4. Add any formatting that will make your document easier for students to understand and complete. (See Word Processing or Spreadsheet sections.)

5. When you complete your assessment, save it in the *assessment* folder in your Portfolio folder.

> Refer to the following Skill Group in the *Help Guide* for this section:
>
> - Teaching Tools Group 4: Assessing Projects Application
> - Word Processing Groups
> - Spreadsheet Groups

Option 2: Modifying an Assessment from the Assessment Strategies Section of Assessing Projects

To modify an exemplary assessment using the *Assessing Projects* application, complete the following:

1. Go to: **www.intel.com/education/AssessingProjects**

2. Click the **Assessment Strategies** tab at the top of the page.

3. Click **Encouraging Self-Direction and Collaboration** in the left-hand navigation bar.

4. Browse the assessment methods in the left column.

5. Click a linked instrument in the right column.

6. Download the file for the assessment you want to use.

7. Modify the assessment to meet the needs of your unit.

8. Add any formatting that will make your document easier for students to understand and complete. (See Word Processing or Spreadsheet sections.)

9. When you complete your assessment, save it in the *assessment* folder in your Portfolio folder.

Option 3: Creating an Assessment Using Word Processing Software

1. Refer to the Word Processing area of the *Help Guide* for assistance in creating your assessment.

2. When you complete your assessment, save it in the *assessment* folder in your Portfolio folder.

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6.07

Pedagogical Practices: Supporting the Diverse Needs of Learners

Determining the right level and type of challenge to help learners grow to meet their potential is critical when differentiating instruction. In this Pedagogical Practices discussion, you think about the kinds of support that will challenge students to stretch their learning as they master new ideas and concepts.

Many students have difficulty transitioning from their role in a "traditional" classroom—one that focuses primarily on taking tests, answering closed questions, completing worksheets, and taking a more passive role in learning—to a classroom that promotes open-ended questions and authentic tasks. "Students who have grown used to being tacit observers or 'sleepy onlookers' may well resent having to work harder, especially when such passive learning roles are the norm in other subjects" (Black & Wiliam, 1998).

Research in learning shows that students learn best when teachers provide instruction in skills, content, and strategies students need to perform tasks that they can not complete without the help of a more knowledgeable peer or adult. Lev Vygotsky (1978), the progressive Russian educator and thinker, defined an area in which a student has trouble solving a problem alone, but can succeed with guidance, as the "zone of proximal development." This zone is just beyond a student's current capacity. "Scaffolding" is a term first coined by Jerome Bruner (1976) based on Vygotsky's concept of the "zone of proximal development." Scaffolding is used frequently by educators to describe the tools that teachers provide to students to help them be successful in tasks that challenge them. This metaphor is especially apt for learning because, as in the construction of buildings, the scaffolding that supports student learning is removed gradually, until the student can complete challenging tasks independently.

In project-based classrooms, teachers provide instruction in the strategies students need for success rather than oversimplifying tasks. The idea is to assist without denying students' needs to build their own foundation. Finding that zone in which students can make the most progress is challenging. Students' language skills—their ability to read, write, and express themselves—can sometimes lag behind their knowledge in academic areas, leaving teachers with an impression that they are less able than they truly are. Other factors, such as a lack of social skills, can also distort the kind of information teachers collect about their students' learning.

A group of educational researchers (Bereiter & Scardamalia, 1987; Langer & Applebee, 1986) suggest the following strategies for scaffolding students' thinking as they work on meaningful tasks:

- Offer different examples for students to imitate
- Set up structures to help students monitor their own progress
- Limit the choices that students have when completing projects

- Provide students with strategies, such as graphic organizers, to help them make their learning processes visible, so they can be discussed and analyzed

- Provide labels to help students categorize and organize knowledge

With a small group, share tools and strategies you can use to support student learning in your unit.

Notes:

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Optional: For additional information on developing self-directed learners, visit the Intel Education _Assessing Projects_ resource.

1. Go to: **www.intel.com/education/AssessingProjects**

2. Click **Overview and Benefits**.

3. Click **Formative Assessment**.

4. Click **Developing Self-Directed Learners**.

5. Click **Return to Formative Assessment**.

6. Click the **Assessment Strategies** tab at the top of the page.

7. Click **Encouraging Self-direction and Collaboration**.

Notes:

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6.09

Activity 3: Creating Support Materials to Facilitate Student Success

In this activity, you create a resource to support your students' self-directed learning during project work. This might be a document, template, or form. The support materials can specify choices that students must make about content, processes, and products. Students use these materials to make decisions that will enhance their skills and make good use of their talents and interests. Effective support materials also provide varying degrees of structure and content to help address the students' special needs.

Step 1: Exploring Sample Resources to Support Student Learning

Templates and forms are useful methods of saving and formatting files so that they can be used easily by others.

A *template* is a master document that contains preformatted elements that cannot be easily altered. A template can contain text, graphics, and settings such as fonts, menus, page layout, special formatting, and styles that you want to appear on all similar documents, presentations, or publications. A template is created in the same manner as any other file but is saved in a specific way that makes it a template.

Word processing templates can be used for student book reports, lab reports, journal entries, lesson plans, letterhead, memos, tests, or any other document with the same formatting that is needed again and again. If desired, templates can scaffold students' work with a new software application. The use of such scaffolds should be reduced as students become more proficient.

A *form* is a structured document with spaces reserved for typing information. You can use a form when you create quick assessments, tests, quizzes, self-reflections, or questionnaires that will be completed by students on a computer. A document that uses form fields is not well-suited for students who are writing drafts or creating formal communication, because text entered into a form field cannot be spell-checked.

1:1 Tip: When students complete individual tasks electronically, new opportunities for providing student support become available. Think about how you can take advantage of this feature of one-to-one computing environments when planning your student support materials.

In this step, you review examples of forms, templates, and documents that students can use to support their learning during a project. Although you create one type of support material during this activity, realize that students can also use wikis and blogs quite effectively to support their learning.

1. View example templates, forms, and documents located in the *Student Support* folder on the Curriculum Resource CD.

2. Consider which templates, forms, or other documents you might use in your unit to support student learning.

   Classroom Tip: Use evidence from the self-direction assessment to create or modify a document to support student learning.

3. Math literacy improves analytical and logical thinking, which can be used across the curriculum. Consider ways you can use math in your unit to improve your students' thinking skills. Resources for integrating math are located in Math Strategies and Math Examples in the *Student Support* folder on the Curriculum Resource CD.

Note any ideas that you may want to incorporate into your student support material.

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Step 2: Creating a Student Support Resource

In this step, you choose one of the following options to create a resource that students will use to support their learning during your unit:

>   **Option 1:** Creating a document (page 6.11)

>   **Option 2:** Creating a document template (page 6.12)

>   **Option 3:** Creating a presentation template (page 6.12)

>   **Option 4:** Creating a form (page 6.13)

Note: Think about Tomlinson's four ways of differentiating instruction described on page 6.02 as you create your student support resource.

Option 1: Creating a Document

1. Use word processing software to create your document. (See the Word Processing section of the *Help Guide*.)

2. Save your document in the *unit_support* folder of your Portfolio folder.

> Refer to the following skills in the *Help Guide* for this section:
>
> • Word Processing Groups 1–12

Module 6

Planning for Student Success

Adding Additional Design Features

Choose from among the additional ideas for types of design and formatting features you may want to include in your document. Use the *Help Guide* if you need assistance in completing any technology skills identified below.

- Insert text as a decorative graphic. To add emphasis to your documents, add text as graphics to your titles or special comments. (See Graphics Skill 9.1.)

- Change text wrapping styles for pictures. Text can interact with graphics in a variety of ways. Text can wrap around an image, appear in front of or behind an image, or appear only above and below an image. (See Word Processing Skill 5.4.)

- Create a watermark. A watermark is a background graphic that lightly shows behind your text. The picture is muted so that it does not compete with the text. (See Word Processing Skill 5.12.)

- Change an existing picture in a document to a watermark. Use a picture that is already in your document as a watermark. (See Word Processing Skill 5.13.)

- Insert an automatic date field. If you insert an automatic date field, the date can update every time the document is printed or modified. (See Word Processing Skill 10.1.)

Option 2: Creating a Document Template

1. Use any of the design features noted in Option 1 to create a document.

2. Save your publication as a template in the *unit_support* folder of your Portfolio folder. (See Word Processing Skill 10.4.)

Option 3: Creating a Presentation Template

In this option, you can create a new template, or if you have a student sample presentation, you can use it as a basis for creating a template.

1. Refer to the Multimedia section of the *Help Guide*, as needed.

2. Save your presentation as a template in the *unit_support* folder in your Portfolio folder. (See Multimedia Skill 4.5.)

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Option 4: Creating a Form

A *form* is a document with spaces reserved for entering information. You can create fill-in text boxes, check boxes, and drop-down lists. Use the *Help Guide* if you need assistance in completing any technology skills identified below.

1. Open the toolbar for creating forms. (See Word Processing Skill 10.10.)

2. Insert form fields. Create fields where you want readers to insert information in your form. (See Word Processing Skill 10.10.)

3. Protect the form. Before you distribute a form that users will view and complete, you must protect it so that users can enter information only in the designated areas. If you do not protect the form, the form elements, such as drop-down menus and check boxes, will not function. (See Word Processing Skill 10.10.)

4. When finished, save your form in the *unit_support* folder in your Portfolio folder.

Notes:

Activity 4: Revisiting My Unit Plan

This activity provides another opportunity for you to review and further refine your Unit Plan. In this activity, you look at ways to include activities and strategies in your unit that encourage self-direction and differentiation for all students. Specifically you need to revisit your Assessment Summary, Instructional Procedures, and Accommodations for Differentiated Instruction sections.

1. Open your Unit Plan.

2. Open and review the Unit Plan Checklist saved in the *unit_plan* folder in your Portfolio folder, which is also available on page A.09.

3. Revise the Assessment Plan section to include additional assessments in which students plan and make choices about their own learning, reflect on their thinking processes (metacognition), and assess their own progress.

4. Modify the Instructional Procedures section to include how you are planning to use the student support materials you created, and implement any differentiation strategies you described.

5. Revise your Accommodations for Differentiated Instruction section using what you have learned in this module.

Note: Consider Tomlinson's principles of differentiation (page 6.02) as you revise your Unit Plan.

6. Save your Unit Plan.

Activity 5: Reflecting on My Learning

Step 1: Reviewing the Module

Review the guiding questions and key points for Module 6 on page 6.22, and think about the ideas and materials you created that can be used in your classroom, instruction, or planning. Also think about self-directed learners and the role of differentiation.

In the following modules, you will build on these concepts as you explore implementation strategies for your unit and the effective management of technology.

Step 2: Blogging My Journey

Reflect on the activities, skills, and approaches addressed in this module in your personal blog.

1. Go to your personal blog, create an entry entitled Module 6 Reflection, copy and paste the following prompt into your entry, and write your response:

    This module has helped me think about self-directed learners and the role of differentiation in the following ways...

2. Write about any other insights, questions or concerns you wish to address in your reflection.

If you have difficulties with the blogging site, use the journal template located in the *Portfolio Assessment* folder of the Curriculum Resource CD to complete your reflection.

Planning for Student Success

Keep in mind the difference between student-support materials and teacher-support materials. Resources you create for teacher support are used entirely by the teacher. For example, you might create a resource such as a classroom wiki to share information with students and parents, a presentation that models a thinking process, a spreadsheet to track students' progress on projects, or an online survey to gather information. Student-support materials, such as project plans and checklists, are used only by students.

Planning Ahead

Pre-Planning Facilitation Materials

Step 1: Considering the Use of Facilitation Resources for Your Unit

Teacher and student roles are different in a student-centered, project-based classroom. In this activity, you consider how technology can support you and your students as you transition to these new roles. You then plan for a facilitation resource to support your role as a facilitator.

As you move from traditional teacher to facilitator, you need to hone your skills in helping students construct their own learning. Use the results from this self-assessment to help plan the facilitation materials you create in Module 7.

1. Review the following table. Using the questions in the first column, conduct a quick self-assessment of your behaviors, classroom climate, and project implementation strategies that support a student-centered classroom.

2. In the second column, add to the ideas listed for how technology could possibly help you become more of a facilitator and make your classroom more student-centered.

   Note: This worksheet is available in Module 6, Planning Ahead, Step 1: Considering the Use of Facilitation Resources for Your Unit in the Notebook.

Differentiation and Technology Worksheet

Self-Assessment	Ways Technology Could Improve This Area
1. I allow and encourage my students to determine the areas of interest they will explore within the subject matter and how they will complete tasks. Never ———— Always	1. Allow students choice of technology tools to demonstrate their learning 2. 3.
2. Students progress through a unit or project, monitoring their own progress. Never ———— Always	1. Create a web-based resource with project guidelines and downloadable materials 2. 3.

Self-Assessment	Ways Technology Could Improve This Area
3. I encourage dialogue and debate among students, where students direct their responses to each other, rather than only to me. Never ●———●———●———● Always	**1.** Create guidelines for using instant messaging **2.** **3.**
4. Students are comfortable sharing their ideas on new concepts, rather than waiting for the "right" answer from me. Never ●———●———●———● Always	**1.** Set up a blog that students respond to **2.** **3.**
5. I encourage students to revise their original thinking and work based on their discovery of new information and the further development of their understanding. Never ●———●———●———● Always	**1.** Use reviewing tools in word processing software **2.** **3.**
6. I ask open-ended questions and encourage student questions. Never ●———●———●———● Always	**1.** Create documents with open-ended prompts and spaces for answers **2.** **3.**
7. I ask students to elaborate on their initial responses. Never ●———●———●———● Always	**1.** Respond to student blogs **2.** **3.**
8. Students do not ask me for the answers; they become the experts by finding the answers themselves. Never ●———●———●———● Always	**1.** Have students tag and evaluate Web sites **2.** **3.**

(Continued)

Planning for Student Success

Self-Assessment	Ways Technology Could Improve This Area
9. I am genuinely learning along with my students. I do not have a pre-determined answer to the open-ended questions I pose to my students. Never ●━━●━━●━━●━━● Always	1. Create my own blog to document my learning 2. 3.
10. I see myself more as a guide or mentor, rather than a lecturer. Never ●━━●━━●━━●━━● Always	1. Provide collaboration tools for students use 2. 3.

Note: If you would like additional information on moving to a more student-centered classroom, review facilitation resources in the *Facilitation* folder on the Curriculum Resource CD.

Marzano, Pickering, and Pollock, in *Classroom Instruction that Works* (2001, p. 146), discuss teaching strategies that teachers should include in the various stages of a unit:

- At the *beginning* of a unit, include strategies for setting learning goals

- *During* a unit, include strategies for:

    o Monitoring progress toward learning goals

    o Introducing new knowledge

    o Practicing, reviewing, and applying knowledge

- At the *end* of a unit, include strategies for helping students determine how well they have achieved their goals

These facilitation strategies support the learning process and mirror the assessment strategies addressed in Module 2. Review the ideas for following materials and consider how these strategies could be supported technologically in your unit.

Examples of Facilitation Materials

Beginning of Unit

Tools to Set Goals:

- Presentations to foster curiosity and structure student inquiry

- Presentations or publications to discuss unit expectations and deadlines with students and/or parents

- A printed project plan that helps students understand and contribute to the expectations, steps, and deadlines of the unit

- Electronic communications to parents through e-mails or web-based resources to identify and clarify the milestones of the project

During a Unit

Tools to Monitor Progress:

- Spreadsheets or forms to keep track of completed tasks for each student or team

- Electronic communications to parents through e-mails or web-based resources to communicate student progress

- Observational anecdotal checklists to record students' use of 21st century skills and content knowledge

Tools to Introduce New Knowledge and Skills:

- Web-based resources, such as wikis or blogs to launch students into research with links to resources

- Presentations for tapping prior knowledge, introducing new concepts or the next stage of the unit

- Projection materials for interactive activities to introduce key concepts and skills

Tools to Practice, Review, and Apply Knowledge and Skills:

- Web-based resources to archive lessons and activities for student review, provide resources and guidance for project assistance, and provide resources for collaboration

- Presentations to model 21st century skills or introduce a daily activity or warm-up

End of Unit

Tools to Assess Goals:

- Online surveys, forms, or web-based resources for reflection questions and setting new goals

- Presentations with pictures of students working and completing project tasks for end-of-project review and prompts for group discussion

- Spreadsheets and forms to collect and analyze student data

- Web-based wikis or blogs to communicate project results

If you are collaborating with other teachers on your Unit Portfolio, discuss how you can best work as a team on this planning activity. Consider using a collaboration Web site, such as those referenced in the Online Collaborative Sites in the *Collaboration* folder of the Curriculum Resource CD.

Step 2: Brainstorming Facilitation Materials

Using the ideas presented in Step 1, brainstorm ideas for facilitation materials that would help you to be more efficient, aid student learning, and implement your unit.

1. Review your facilitation self-assessment and choose areas you would like to emphasize more frequently in your classroom.

2. What are some possible facilitation materials you could create to address these areas?

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Module 6 Summary

Review the guiding questions and key points of Module 6 and think about the ideas and materials you have created that can be used in your classroom, instruction, or planning to help improve student learning.

Module Questions:

- How can I help my students become self-directed learners?
- How can I support the diverse needs of learners?

Module 6 Key Points:

- Transitioning to a student-centered classroom demands adjustments from both students and teachers:
  - Teachers must work with students to help them develop self-direction skills.
  - Students must take an active role in their own learning.
- Teachers can differentiate instruction in four ways:
  - Content
  - Process
  - Products
  - Learning Environment
- Teachers can look at learning styles in several ways, including visual-kinesthetic-auditory, left brain/right brain, and multiple intelligences.
- Accommodating the needs of all learners requires appropriate scaffolding so that students become confident, independent learners.

In the following modules, you will build on these concepts as you discuss implementation strategies for your unit and the effective management of technology.

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