

**Understanding by Design:  
Stage Two  
Determining  
Assessment Evidence**

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# AGENDA

**Objectives:** Participants will be able to—

- Align the three stages of the Understanding by Design backward design process, emphasizing Stage Two (determining evidence of student understanding).
  - Explain the benefits of a balanced approach to classroom assessment.
  - Use a range of assessment tools (e.g., constructed-response test items, reflective assessments, academic prompts, culminating projects, portfolios, scoring tools) to monitor and promote high levels of student achievement.
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- ❖ Introductions, Agenda Setting, and Warm-Up Activity
  - ❖ Reviewing the Three Stages of Backward Design
  - ❖ Essential Questions and District Standards: Uncovering Understandings
  - ❖ “Unpacking Standards”: What Should All Students Know, Do, and Understand?
  - ❖ Aligning District Content Standards and the Six Facets of Understanding
  - ❖ Creating Performance Standards Based upon District Content Standards
  - ❖ Preparing Students for High-Stakes Accountability Testing
  - ❖ Key Principles of a Balanced Assessment Process: The “Photo Album” Approach
  - ❖ Using Constructed-Response Test and Quiz Items
  - ❖ Reflective Assessment: Putting the Learner at the Center of the Evaluation Process
  - ❖ Academic Prompts: Ensuring Clear Format, Audience, Topic, and Purpose for Effective Performance Assessment Task Design
  - ❖ Culminating Performance Assessment Tasks and Projects
  - ❖ Scoring Performance Assessment Tasks: Holistic and Analytic Rubrics and Scoring Guides
  - ❖ Key Elements of an Effective Student Portfolio
  - ❖ Creating a Vision for Instructional Leadership and the Assessment Process in 21<sup>st</sup> Century Schools

## **Tool One: Balanced Assessment and the Effective Learning Community**

### **Directions:**

**Use the following rating scale to assess the extent to which your learning community has addressed each of the following assessment principles as part of its efforts to promote student achievement:**

**4**=We have addressed this principle to a high degree in our learning community.

**3**=We have addressed this principle to some degree in our learning community.

**2**=We need to increase our emphasis upon this principle within our learning community.

**1**=We need to greatly increase our emphasis upon this principle.

**0**=We have not dealt with this element of assessment in our learning community.

### **Part I:**        *All effective assessment must begin and end with standards.*

1.        We have worked together to understand and address the purpose of standards in our educational setting.
2.        We have helped all our staff to emphasize the important relationship between standards, assessment, and instruction.
3.        As a staff, we work collaboratively to ensure that all our students understand the standards for which they are responsible and how those standards are the basis for evaluating their performance.
4.        We have achieved consensus as a staff about what each standard means for student learning.
5.        We have mapped our curriculum to ensure that we agree on what all students should know, be able to do, and understand.
6.        As a staff, we communicate these outcomes consistently to all our students.
7.        We provide ongoing monitoring and feedback as students progress toward satisfactory or proficient levels of performance relative to our standards.

### **Part II:**        *Content standards should guide and inform instructional decision making, but instructional leaders must help staff to understand the role of performance standards and related benchmark assessments.*

1.        We have translated district content standards into consensus-driven performance indicators that describe the levels of proficiency or competence expected of all students at a particular grade level.
2.        As a staff, we assess student achievement in relationship to these performance indicators.
3.        We have mapped these performance indicators according to the grading periods that comprise our school year.

- \_\_\_\_\_4. Everyone in our learning community has worked closely to develop and implement benchmark assessments to evaluate the extent to which all students are achieving mastery of our performance standards.

**Part III:** *Effective learning communities support classroom teachers in developing a feedback-adjustment process related to consensus-driven standards.*

- \_\_\_\_\_1. We support classroom staff to monitor closely how all students are progressing relative to our content and performance standards.
- \_\_\_\_\_2. Staff members adjust their instruction to accommodate emerging issues and trends related to student achievement.
- \_\_\_\_\_3. Every teacher in our school or district successfully implements an ongoing feedback-adjustment process to ensure that instruction promotes achievement by all students of our content and performance standards.
- \_\_\_\_\_4. As a result of the relationship between assessment and instruction in our school or district, students receive appropriate and individualized instruction to ensure their success.

**Part IV:** *The effective learning community helps all staff members to share a common vision for the success and achievement of all students. Equity and excellence become controlling principles that replace mechanical “teaching to the test.”*

- \_\_\_\_\_1. As a result of instructional leadership, staff members in our learning community emphasize student understanding, not just knowledge-recall.
- \_\_\_\_\_2. We emphasize instruction and assessment tied to meaningful and authentic contexts that promote student interest and engagement.
- \_\_\_\_\_3. Staff members encourage students to support claims and assertions with valid and appropriate evidence (i.e., application).
- \_\_\_\_\_4. We encourage all students to construct meaning and express that meaning through the creation of original work, including analogies, metaphors, oral and written communication, and other media (i.e., interpretation).
- \_\_\_\_\_5. Staff members emphasize students’ ability to apply what they have learned to new, novel, or unpredictable situations (i.e., application).
- \_\_\_\_\_6. Staff members encourage students to analyze and evaluate differing perspectives related to controversial or debatable issues (i.e., perspective).
- \_\_\_\_\_7. Staff members reinforce students’ ability to understand how others are experiencing similar events and situations (i.e., empathy).
- \_\_\_\_\_8. All staff emphasize students’ ability to revisit, revise, rethink, and refine and engage in ongoing self-evaluation (i.e., self-knowledge).

## **Tool Two: Defining Our Terms**

### **Directions:**

One of the key aspects of effective balanced assessment is staff members' achievement of consensus regarding the meaning of key terms. The following activity can help to promote that consensus-building process during a faculty meeting or staff training session:

1. First, individual staff members should create their own definition for each of the following terms related to the field of educational assessment.
2. Second, each staff members should find a partner to explore how they agree—or disagree—about the meaning of each term.
3. Third, when partners finish, they should join other teams at their table to build group consensus about the meaning of each term.
4. Finally, the entire faculty reassembles to determine which of the terms needs further discussion or consensus-building.
5. At the conclusion of this session, instructional leaders should publish a staff glossary of assessment terms.

### **1. assessment:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

### **2. evaluation:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

3. **content standards:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

4. **performance standards:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

5. **benchmarks:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

6. **formative vs. summative assessment:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

**7. performance assessment:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

**8. authentic assessment:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

**9. rubric:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

**10. feedback-adjustment process:**

*My definition:*

*Pairs-share definition:*

*Full-faculty definition:*

**Tool Three: Beginning with the End in Mind—  
“Unpacking” Standards (Part I)**

**Directions:**

A particularly significant aspect of balanced assessment in any educational organization is facilitating what we call “unpacking standards.” Following is a step-by-step planning chart that can provide a template for this process. Using staff input achieved through ongoing consensus-building, the results can be easily integrated into your long-range school improvement plan:

<b>Long-Range Goal</b>	<b>Completion Date</b>	<b>Required Resources</b>
1. Achieve consensus about our content standards, i.e., what all students should know, do, and understand at the end of each grade level or course.		
2. “Map” content standards by determining during which grading period each standard should be taught and learned by all students.		
3. Generate (or use district-generated versions, if available) performance indicators for each standard, describing expected levels of achievement according to course and/or grade level.		
4. Create benchmark assessments to be used by staff to monitor student achievement relative to consensus-driven performance and content standards at appropriate points within a course or grade level.		
5. By department and grade level, begin to analyze data patterns related to aggregate (i.e., full-group) and disaggregated student achievement data based upon benchmark performance.		
6. Facilitate study groups, inquiry teams, and action research cohorts to examine and create action plans to address emergent issues and problems associated with aggregate and disaggregated student achievement data.		

<p>7. Provide ongoing professional development to ensure that all staff members develop and implement a feedback-adjustment process in order to differentiate instruction to address the individual strengths and needs of all students.</p>		
<p>8. Continue to emphasize the use of a range of assessment tools by all staff members to monitor student achievement relative to consensus-driven standards, including tests and quizzes with constructed-response items, reflective assessments, performance assessment tasks in response to academic prompts, and culminating performance-based assessment projects.</p>		
<p>9. Ensure that staff discussion and analysis of student achievement results is an important and ongoing part of faculty meetings, department planning, and parent and community outreach efforts.</p>		

**Tool Three: Beginning with the End in Mind—**  
**“Unpacking” Standards (Part II)**

1. **With a partner, examine and discuss each of the following standards, applying the following evaluation questions:**
  - a. To what extent is the standard clear in the way it presents what students are expected to know or be able to do?
  - b. To what extent does the standard describe what students at a specific age or grade level should learn? To what extent is it global and applicable to multiple grade levels?
  - c. To what extent is the standard vague or general, leading to the need for staff to build consensus about what it means relative to student learning?
  - d. To what extent is the standard useful as a basis for designing an evaluation tool or process to monitor and assess student learning?
  - e. How would you recommend modifying the standard to improve its ability to guide teaching, learning, and assessment?

***Sample Standards for Review:***

**Reading/Comprehension.** The student uses a variety of strategies to comprehend selections read aloud. The student is expected to:

- (A) use prior knowledge to anticipate meaning and make sense of texts;
- (B) establish purposes for reading or listening such as to be informed, to follow directions, and to be entertained; and
- (C) retell or act out the order of important events in stories.

**Reading/Text Structures/Literary Concepts.** The student recognizes characteristics of various types of texts. The student is expected to:

- (A) distinguish different forms of texts such as lists, newsletters, and signs and the functions they serve;
- (B) understand simple story structure;
- (C) distinguish fiction from nonfiction, including fact and fantasy;
- (D) understand literary forms by recognizing and distinguishing among such types of text as stories, poems, and information books; and
- (E) understand literary terms by distinguishing between the roles of the author and illustrator such as the author writes the story and the illustrator draws the pictures.

**Writing/Purposes.** The student writes for a variety of audiences and purposes and in a variety of forms. The student is expected to:

- (A) write to express, discover, record, develop, reflect on ideas, and to problem solve;
- (B) write to influence such as to persuade, argue, and request;
- (C) write to inform such as to explain, describe, report, and narrate;
- (D) write to entertain such as to compose humorous poems or short stories;
- (E) select and use voice and style appropriate to audience and purpose;
- (F) choose the appropriate form for his/her own purpose for writing, including journals, letters, editorials, reviews, poems, presentations, narratives, reports, and instructions;
- (G) use literary devices effectively such as suspense, dialogue, and figurative language; and
- (H) produce cohesive and coherent written texts by organizing ideas, using effective transitions, and choosing precise wording.

**Scientific Processes.** The student uses scientific methods during field and laboratory investigations. The student is expected to:

- (A) plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology;
- (B) collect data and make measurements with precision;
- (C) express and manipulate chemical quantities using scientific conventions and mathematical procedures such as dimensional analysis, scientific notation, and significant figures;
- (D) organize, analyze, evaluate, make inferences, and predict trends from data; and
- (E) communicate valid conclusions.

**Science Concepts.** The student knows forces in nature. The student is expected to:

- (A) identify the influence of mass and distance on gravitational forces;
- (B) research and describe the historical development of the concepts of gravitational, electrical, and magnetic force;

- (C) identify and analyze the influences of charge and distance on electric forces;
- (D) demonstrate the relationship between electricity and magnetism;
- (E) design and analyze electric circuits; and
- (F) identify examples of electrical and magnetic forces in everyday life.

**Number, Operation, and Quantitative Reasoning.** The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to:

- (A) compare and order non-negative rational numbers;
- (B) generate equivalent forms of rational numbers including whole numbers, fractions, and decimals;
- (C) use integers to represent real-life situations;
- (D) write prime factorizations using exponents; and
- (E) identify factors and multiples including common factors and common multiples.

**Measurement.** The student solves application problems involving estimation and measurement of length, area, time, temperature, capacity, weight, and angles. The student is expected to:

- (A) estimate measurements and evaluate reasonableness of results;
- (B) select and use appropriate units, tools, or formulas to measure and to solve problems involving length (including perimeter and circumference), area, time, temperature, capacity, and weight;
- (C) measure angles; and
- (D) convert measures within the same measurement system (customary and metric) based on relationships between units.

**Citizenship.** The student understands characteristics of good citizenship as exemplified by historic figures and ordinary people. The student is expected to:

- (A) identify characteristics of good citizenship such as a belief in justice, truth, equality, and responsibility for the common good;
- (B) identify historic figures such as Clara Barton, Nathan Hale, and Eleanor Roosevelt who have exemplified good citizenship; and

- (C) identify ordinary people who exemplify good citizenship and exhibit a love of individualism and inventiveness.

**Social Studies Skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:

- (A) obtain information about a topic using a variety of oral sources such as conversations, interviews, and music;
- (B) obtain information about a topic using a variety of visual sources such as pictures, graphics, television, maps, computer images, literature, and artifacts;
- (C) sequence and categorize information; and
- (D) identify main ideas from oral, visual, and print sources.

**Notes and Reactions:**

## **Tool Three: Beginning with the End in Mind— “Unpacking” Standards (Part III)**

### **Creating Performance Standards**

A *performance standard* is derived from a content standard. Unlike the typical content standard, however, an effective performance standard does not “*spiral,*” i.e., present a general or global outcome statement that can be applied to multiple age or grade levels of students. We measure and evaluate student progress in relationship to content standards by creating performance standards that describe student behaviors that are grade-level or reporting-period-specific. *In effect, if a student at a particular grade-level or during a particular reporting period achieves competence or proficiency relative to our performance standards, we can certify that they are progressing satisfactorily in achieving mastery of cross-grade level content standards.*

#### **A good performance standard:**

1. Describes a specific and observable behavior(s) which the learner is expected to demonstrate at a particular grade level relative to a specific content standard.
2. Identifies the specific product or performance which the learner should generate in order to confirm mastery of the performance standard.
3. Describes the conditions or context within which the behaviors, products, and performances are to be demonstrated.
4. Identifies evaluation criteria or performance standards which the learner is expected to demonstrate.

#### **Sample Performance Standards Derived from Actual Content Standards:**

1. ***Content Standard:*** Obtain information about a topic using a variety of oral sources such as conversations, interviews, and music.

***Performance Standard:*** Using data generated through interviews and conversations with family members, students will create a newspaper article summarizing their family’s reactions to a significant issue in world politics. The article should reflect the elements of effective newspaper style, including appropriate format, organization, and sustained use of direct quotes and paraphrased information.

2. ***Content Standard:*** Identify historic figures such as Clara Barton, Nathan Hale, and Eleanor Roosevelt who have exemplified good citizenship.

**Performance Standard:** At the completion of a literature unit on legends and folk tales from American history, students will write a paragraph describing how a particular American folk hero demonstrates—or fails to demonstrate—aspects of good citizenship. Their paragraph should be clearly organized and well developed using supporting evidence such as concrete examples, illustrations, anecdotes, and reasons.

3. **Content Standard:** Estimate measurements and evaluate reasonableness of results.

**Performance Standard):** Students will complete a series of initial measurement estimates for spaces in their school environment followed by their actual measurement of each space. They will create a written summary of their pre- and post-results, providing concrete reasons for any differences between estimated and actual measurements. They will also present a brief action plan for how they can improve their ability to estimate spatial measurements in future situations.

4. **Content Standard): Scientific Processes:** The student uses scientific methods during field and laboratory investigations. The student is expected to:

- (A) plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology;
- (B) collect data and make measurements with precision; and
- (C) organize, analyze, evaluate, make inferences, and predict trends from data.

**Performance Standard:** At the completion of a unit on interdependence in ecological systems, the student will select a local habitat/eco-system to investigate. After generating a hypothesis about the present quality of this eco-system and the level of impact resulting from human intervention, the student will conduct a series of water quality studies and observations of flora and fauna within the system. At the conclusion of this process, the student will develop a summary report, analyzing data generated in relationship to how his/her original hypothesis has been confirmed or negated. As part of this report, the student will make predictions about the future development of the eco-system studied, including possible trends related to the survival of life forms if current levels of human intervention continues at their present pace.

### **Design Activity:**

Return to the content standards presented in the previous activity. In the time provided, create **at least one** performance standard for **at least one** content standard for **each** of the identified categories (Reading Comprehension, Reading/Text Structures/Literary Concepts, Writing Purposes, Scientific Processes, Science Concepts, Number/Operation/Quantitative Reasoning, Measurement, Citizenship, and Social Studies Skills).

### **Our Sample Performance Standards:**

**Reading Comprehension:**

**Reading/Text Structures/Literary Concepts:**

**Writing Purposes:**

**Scientific Processes:**

**Science Concepts:**

**Number/Operation/Quantitative Reasoning:**

**Measurement:**

**Citizenship:**

**Social Studies Skills:**

## **Tool Four: Preparing Students for High-Stakes Accountability Assessments**

### **Directions:**

The following questionnaire can help you to facilitate staff discussion and analysis of the extent to which they are using research-based best practices in preparing students for high-stakes tests within your school or district. Ask each staff member to use the following rating scale to assess the degree to which they perceive each of the following practices is operational in your school or district. Compile group results and use them as a basis for follow-up action planning.

**5**=This strategy is highly evident throughout our school.

**4**=This strategy is evident in most grade levels and/or departments.

**3**=We have begun to use this strategy, but more emphasis is needed.

**2**=We have discussed this strategy, but we need to do much more with it.

**1**=We have done little if anything with this strategy.

**0**=This strategy is entirely missing from our work to prepare students for high-stakes accountability testing.

- \_\_\_\_\_ 1. We analyze testing specifications and related public-release testing documents to determine what students should know, do, and understand to respond successfully to test items.
- \_\_\_\_\_ 2. We disaggregate test results to determine which aspects of the assessment present particular problems for all students and for particular sub-groups.
- \_\_\_\_\_ 3. We determine specific instructional strategies and processes consistent with testing requirements and implement them as a regular part of our classroom activities.
- \_\_\_\_\_ 4. As a staff, we consistently help our students scaffold and bridge their learning in order to ensure successful transfer into increasingly more independent settings and assessment situations.
- \_\_\_\_\_ 5. We all employ an effective feedback-adjust process in our classrooms to ensure that we monitor the progress of all students and adjust instruction to accommodate their individual strengths and needs.
- \_\_\_\_\_ 6. We make certain that all students understand what is required of them to be successful on high-stakes accountability tests.
- \_\_\_\_\_ 7. All students receive appropriate support and instruction to ensure that they are the center of their own assessment and learning process.

- \_\_\_\_\_8. We coach all our students to adjust their use of what they are learning based upon the performance requirements they are confronting at a particular time.
- \_\_\_\_\_9. Preparing students for success on high-stakes tests means that we continually teach all students the knowledge, skills, and understandings required by those tests, rather than stopping instruction to “teach to the test” itself.
- \_\_\_\_\_10. Our students develop a conscious toolkit of strategies and understandings from which they can select appropriate tools for a particular occasion, rather than mechanical repetition or modeling of formulaic knowledge and skills.
- \_\_\_\_\_11. We encourage our students to generate original claims and assertions and support those statements with valid and reliable evidence.
- \_\_\_\_\_12. We coach our students to draw inferences and make predictions based upon their analysis of print and non-print texts.
- \_\_\_\_\_13. We continually help all students to use what they have learned to respond to new, novel, or unpredictable situations and tasks.
- \_\_\_\_\_14. We help all students to analyze differing perspectives and points of view as well as to develop empathy for others.
- \_\_\_\_\_15. We reinforce students’ self-knowledge, encouraging all students to reflect, revise, rethink, and self-monitor and self-evaluate.

## **Tool Five: Key Principles of a Balanced Assessment Process**

### **1. VISION:**

All staff members employ a “photo album” approach to assessing and evaluating student progress by using multiple forms of assessment instead of limited “snapshots.”

### **2. KEY ELEMENTS:**

#### **a. Constructed-Response Items on Tests and Quizzes:**

Including on every test or quiz some form of short or extended performance task (e.g., writing, lab work, observation activity, comparative text analysis).

#### **b. Reflective Assessments:**

Encouraging all students to reflect, revise, rethink, and self-assess through such tools as reflective journals, think logs, evaluation activities, think-pair-shares, and KWLs (I think I know, I want to learn, I have learned).

#### **c. Academic Prompts:**

Structuring performance assessment tasks using a written prompt that describes the format, audience, topic, and purpose of the assessment activity.

#### **d. Culminating Performance Assessment Tasks and Projects:**

At key points throughout the year, students demonstrate independently their growing knowledge, skills, and understandings by engaging in reality-based projects with real-world goals, roles, audiences, situations, products and performances, and carefully-articulated standards.

#### **e. Portfolio Assessment:**

A collection of student work that consists of representative artifacts as well as students’ self-reflections and self-evaluations of their formative and summative progress relative to identified standards.

**Tool Six: Creating a Photo Album,  
Not a Snapshot, of Assessment Results—  
A Faculty Questionnaire**

**Directions:**

Instructional leaders can help transform assessment practices in their school or district by encouraging all staff to understand the importance of a photo album approach to this process. Use the following staff questionnaire to determine staff perceptions about the extent to which a balanced, photo album approach to assessment is operational in your school or district. Each staff member uses the following rating scale to evaluate the extent to which each strategy is presently operational, with follow-up planning at departmental or grade levels to create an action plan to address omissions.

- 5=Highly and consistently evident throughout our school
- 4=Consistently evident in a majority of grade levels and/or departments
- 3=Consistently evident in some grade levels and/or departments
- 2=Sporadically evident
- 1=Little if any evidence
- 0=No evidence

- \_\_\_\_\_1. We avoid one-shot or limited assessment approaches.
- \_\_\_\_\_2. Our assessment process is based upon multiple forms of evidence, not just tests and quizzes.
- \_\_\_\_\_3. We seek to create a varied and comprehensive portrait of students' progress aligned with consensus-driven content and performance standards.
- \_\_\_\_\_4. Our tests and quizzes include constructed-response items in addition to such selected-response assessment activities as multiple choice, true-false, and fill in the blank.
- \_\_\_\_\_5. We encourage our students to reflect, revise, rethink, and refine.
- \_\_\_\_\_6. We support all students in the process of self-assessment and self-evaluation, ensuring that they monitor their own progress against our standards.
- \_\_\_\_\_7. We use a variety of reflective assessment tools, including reflective journals, think logs, evaluation activities, think-pair-share exercises, and peer response groups.
- \_\_\_\_\_8. All classrooms make use of academic prompts to present assessment tasks, including clear articulation of format, audience, topic, and purpose for each task.

- \_\_\_\_\_9. At key points in each grading period, students participate in real-world, authentic culminating projects that allow them to demonstrate their understanding and mastery of standards in creative, innovative, and original ways.
  
- \_\_\_\_\_10. Each student maintains a portfolio of his or her work in every classroom and subject, including maintenance of representative work products and artifacts as well as reflections and self-evaluations.

## **Tool Seven:**

### **Sample Constructed-Response Test and Quiz Items**

1. Examine the following political cartoons. Write a one-paragraph analysis of how they reflect conflicting perspectives on the Vietnam War.
2. Assume that you are one of the surviving characters at the conclusion of Shakespeare's tragedy Romeo and Juliet. Write a letter to a relative in another city explaining the major causes leading to the demise of the two protagonists.
3. When you have concluded the first part of your test, hand in your paper and pick up Part II. During Part II, you will be asked to go to each of the microscope stations around the classroom and examine four specimens of cell structure. When you have observed each, identify the organism associated with it and provide a brief explanation for your conclusion.
4. Write a postcard to a student who was absent during our study of the Pythagorean Theorem explaining the significance of this theorem and describing how to use it.
5. Listen to each of the following musical segments. At the conclusion of each segment, write a brief description of the style of music represented by each and an explanation for your choice.
6. Imagine that you are a reporter working during the time of the American Revolution. Write a brief news article summarizing the causes leading up to the Boston Tea Party and the effects it had upon the development of political and economic unrest during that era.
7. Count off in pairs. As your instructor observes you in action, demonstrate your best blocking and passing behaviors.
8. Create a PowerPoint slide that includes a minimum of four (4) elements we studied during this unit.

## **Tool Eight: Suggestions for Engaging the Learner in Self-Reflection and Self-Evaluation**

### **1. Reflective Journals:**

Students do in-class timed writings in which they reflect upon key aspects of that day's lesson or their progress over the course of the current unit in which they are participating.

#### **Sample Reflective Journal Response Prompts:**

- What were the most important elements of our lesson today?
- How does what we learned today relate to our world beyond the classroom?
- What aspects of the unit so far have been most clear to you?
- Are there any unit elements to this point about which you are confused? Why?

### **2. Think Logs:**

Students are asked to reflect upon and evaluate the extent to which they understand and can use specific thinking skills, procedures, and/or habits of mind.

#### **Sample Think Log Response Prompts:**

- During this unit we emphasized the thinking skill of classification. As we conclude this unit, how would you define "classification"? How well do you understand this skill? Are there any aspects of it with which you need help? Why?
- In our unit on the Industrial Revolution, we have emphasized the procedure of decision-making. How would you explain this procedure to a friend? How comfortable are you in applying this procedure now as we conclude our unit?
- Throughout this grading period, we have asked you to use the habit of mind known as "self-regulation." How would you evaluate your current ability to use such self-regulation strategies, as goal setting, comprehension monitoring, and restraining impulsivity? In what aspects of self-regulation would you like to improve? Why?

### **3. Self-Assessment and Evaluation Activities:**

Students participate in a variety of activities and exercises designed to encourage self-evaluation and self-reflection.

**Sample Self-Evaluation Response Prompts:**

- Before you turn in your research paper, use our class scoring guide to self-evaluate your final product. Which aspects of your paper do you consider to be your strongest? For future projects, on which aspects of the research process do you need to improve? Why?
- In your journal, take ten minutes to evaluate your progress to date in completing your independent project. What aspects of our timeline have you completed? Which aspects, if any, are presenting you with challenges or difficulties? Why?
- As we have stressed throughout this grading period, we are all responsible for contributing to a community of learning in our classroom. Take some time now to reflect in your journal about your role in this process. What are your major contributions? In what ways, if any, might you improve next quarter? Why?

**4. Collaborative Evaluation Strategies:**

Students engage in a variety of formal and informal activities designed to promote peer coaching and interactive reflection.

**Sample Interactive Evaluation Task Prompts:**

- Listen to the following question about technology in our world: “What would happen if the Internet were to disappear tomorrow? How would our world change?” Think about this question and spend a few minutes individually brainstorming possible consequences. Then pair up with another student. Discuss your reactions together. Be prepared to share your responses with the rest of the class at the end of ten minutes.
- As we begin this unit on ecosystems in the Arctic: (1) What do you think you know about life and survival in the Arctic Circle? (2) What would you like to learn? (3) As we conclude this unit, what have you learned? How were any original misunderstandings or misconceptions cleared up?

- Peer Response Group Activity: Now that you have completed your initial draft of your descriptive composition, form peer response groups of two to three students. Each of you will read your draft to the other members of the group. Use our class rubric on descriptive writing to apply the P-Q-P process: (1) Praise: What did you particularly like and what was particularly effective about the compositions of your partners? (2) Question: Are there any questions your partners' compositions raise? (3) Polish: Based upon the criteria in our rubric, are there any suggestions for revision that you can make?

## **Tool Nine: Elements of an Effective Academic Prompt**

### **1. RATIONALE:**

Students respond best during performance assessment tasks when they are clear about their purpose as well as their topic, audience, and the format in which they are to present their responses.

### **2. ELEMENTS OF AN EFFECTIVE ACADEMIC PROMPT:**

- a. **FORMAT:** The form (e.g., letter, postcard, essay, debate) in which the student is to present his or her response to the prompt.
- b. **AUDIENCE:** The individual or group to whom the response is to be addressed. The audience will determine the tone, approach, and voice to be adopted by the student.
- c. **TOPIC:** The content upon which the student is to concentrate in generating his or her response to the prompt.
- d. **PURPOSE:** The rationale or reason(s) to be addressed in generating the performance identified by the prompt.

### **3. SAMPLE ACADEMIC PROMPTS:**

- a. Think about a time when you were surprised (**topic**). Write a letter (**format**) to a friend (**audience**) in which you describe that time so that he or she experiences what you felt (**purpose**). Be certain that your letter has a clear beginning, middle, and end, and that you use transitional expressions and concrete details to heighten your description's impact upon your reader.
- b. People often have a difficult time understanding the difference between equal and equivalent fractions (**topic**). Write a postcard (**format**) to a classmate (**audience**) who was absent for our unit on equivalent fractions. In your postcard, explain the difference between these two types of fractions so that he or she understands them (**purpose**).

- c. Imagine that you are a 17<sup>th</sup> century citizen of England. You have the opportunity to live in one of the three regions comprising the thirteen original colonies (New England, Mid-Atlantic, Southern/Plantation). Write a letter (**format**) to the king (**audience**) in which you identify which region you wish to live in (**topic**) and why you choose to live there (**purpose**).
  
- d. Now that we have completed this unit on volleyball, select a partner (**audience**) and explain and demonstrate (**format**) to him or her how to perform successfully (**purpose**) at least three of the volleyball strategies (**topic**) we learned in this unit.
  
- e. Select one of the historical figures we have studied this quarter. Write a letter to the editor (**format and audience**) of a newspaper from his or her time period in which you present your views (**purpose**) about a significant issue or problem that dominated the era in which you lived and about which you had a deep concern (**topic**).

**Tool Ten: Creating Successful Culminating  
Performance-Based Assessment Projects**

**ELEMENTS OF A SUCCESSFUL  
CULMINATING PROJECT**

**G**= *Real-World Goal(s)*: An effective project engages students in tasks that are reality-based and aligned with the types of activities engaged in by professionals in the field.

**R**= *Real-World Role(s)*: A successful culminating project requires that students assume some form of authentic role other than that of “student.”

**A**= *Real-World Audience(s)*: Performance-based culminating projects ask students to respond to an authentic audience, modifying their content and approach to accommodate the unique needs and expectations of that real or simulated individual or group.

**S**= *Authentic Situation(s)*: Good projects always engage students in some form of reality-based problem solving, decision making, investigation, or invention process.

**P**= *Products and Performances*: An effective culminating task requires that students generate both a real-world product and present that product in some form of performance or presentation for the identified audience.

**S**= *Standards*: All effective projects include clearly-articulated standards to be used to evaluate both final products and performances.

## **Tool Eleven:**

### **Sample Culminating Assessment Projects**

1. You and your family are thinking about embarking upon a trip across the great Western divide during the mid-19<sup>th</sup> century. At the conclusion of your trip, you will be able to settle in a territory of your choice and stake a homesite, if you and your relatives survive the journey. Your job, however, is to persuade the other members of your family that the potential benefits of the trip outweigh the potential hazards. Create a visual presentation for your family members in which you map out the route you propose, identifying potential hazards and problems that you may encounter together. Project how long the trip will take, the materials and supplies you will need to gather, and problem-solving strategies for addressing hazards that may arise. Based upon your knowledge of what awaits you at the end of the journey, convince your family members to take the chance and go on the trip with you. You will be evaluated on the accuracy of your presentation, its persuasiveness, and its demonstration of your problem-solving prowess.
2. Your class has been asked to develop and publish a mathematics textbook designed to help younger students see the value of arithmetic and algebra in our world. You will be part of the writing and editing team on this text. Each of you will be responsible for designing and formatting at least five (5) real-world situations involving arithmetic and algebra problems to be included in the textbook. When you have developed and formatted your problems, you will share them with the rest of the team. After your group has completed the first draft of your textbook, other writing teams in the class will be asked to review it using the rubric criteria we will generate in class. When each writing group completes its final draft, we will ask students in our local elementary school to try out the problems and provide us with feedback about how well the activities help them to understand the value of arithmetic and algebra in our world.
3. As we have seen in class during this unit, patterns are everywhere in our world. The more we can observe, describe, and analyze these patterns, the better we can understand our world and how its various elements are interrelated and interconnected. Create a PowerPoint

presentation for other students in our school, designed to help them to observe and see the relationships among various objects and processes in our community. In your presentation, include a variety of pattern groupings and classifications, including visual patterns, numerical patterns, relationship patterns, and social patterns. Your final PowerPoint presentation will be presented to other students who will be asked to evaluate it on the basis of its originality, its comprehensiveness, and its clarity.

4. Now that we have completed our study of Shakespeare's tragedy Macbeth, we have been asked to work with members of the graphic design program to create a website. On this website, we will introduce members of our school community to the following: the key characters in the tragedy, the major conflicts within the play, the history and background of Shakespeare's work and theatre, and the universal themes and implications of the work itself. We will need to integrate visual material from a variety of on-line sources as well as using print materials which we can scan into the site. The website should also include an on-line question and answer room through which readers can pose questions about the play which we will be responsible for answering. We will be evaluated on the originality of the site, its accuracy, its accessibility to the reader, and the power of its visual and linguistic elements.
5. We have been asked to apply to become a part of an Amazon rain forest expedition team responsible for studying this amazing ecosystem and reporting our findings to a panel of experts from the National Science Foundation (NSF). Before we can embark on our trip to the Amazon, however, we have to prove that we are knowledgeable about its various flora and fauna, as well as about the scientific, ecological, social, and economic problems confronting it. We will form groups of three to four individuals from our class, each of which will create a report on some aspect of the Amazon environment and what is happening there currently. Groups will be responsible for researching a particular question related to a key problem or issue. They will choose how to present their findings and conclusions to the NSF review panel. We will be evaluated on the accuracy of our findings, the thoroughness of our research, and the originality of our presentation style and format.

**Tool Twelve:**  
**Sample Holistic and Analytic Rubrics**  
**and Scoring Guides**

**I. Operational Definitions**

- A. Holistic Rubric:** A scoring tool which describes attributes or characteristics of a performance or product, organized according to a set of score points. The rater, for example, determines if the performance or product most closely resembles the descriptor for a “4,” a “3,” a “2,” or a “1” score point.
- B. Analytic Rubric:** A rubric that includes two structural components: (1) A delineation of factors to be evaluated for a particular product and/or performance (e.g., levels of understanding, quality of completed product, quality of presentation); and (2) a set of descriptors organized according to a range of score points, similar to a holistic rubric, to describe levels of performance for each of the identified scoring factors.
- C. Scoring Guide:** An analytical scoring instrument which assigns point values or percentage weights to the various factors which an evaluator must consider when assessing a particular product and/or performance.

**Sample Scoring Tools**

**Sample Holistic Rubric for Narrative Writing**

- 4:** Composition is extremely well organized with a clear beginning, middle, and end that move through logically through time. Realistic dialogue, concrete sensory details, and overall attention to vivid description contribute to the narrative’s sense of verisimilitude.
- 3:** Composition is generally well organized with a narrative sequence that has few if any interruptions. Dialogue is generally realistic and is complemented by some attention to sensory details and description. The narrative is straightforward and generally convincing.
- 2:** The organization of the composition is weak, with much greater need for attention to logic of narrative sequencing. Dialogue is minimal and there is inconsistent attention to sensory details and related descriptive information. Overall, the narrative is unconvincing and mechanical in approach.
- 1:** The organization of the composition is poor with many gaps in narrative logic and sequencing. There is little if any dialogue or description. An overall narrative is either missing or extremely confusing for the reader.

## Sample Analytical Scoring Rubric

<b>Understanding (60%)</b>	<b>Product (30%)</b>	<b>Presentation (10%)</b>
<b>4</b> =High level of understanding demonstrated through evidence of independent application; subtle connections; and extensive and valid evidence to support all major claims and assertions.	<b>4</b> =Composition is extremely well organized and fully developed with extensive evidence of original ideas and assertions supported by consistent evidence of independent research.	<b>4</b> =Culminating presentation characterized by highly effective attention to the needs of your audience as well as creative use of visual aids to reinforce coherence, development, and persuasiveness.
<b>3</b> =Adequate demonstration of understanding that reflects some original insights and sections that are well developed, while others need additional evidence to support fully with evidence all major claims and assertions.	<b>3</b> =Composition is generally clearly organized with some sections fully developed through original analysis, but other sections would benefit from greater attention to supporting details and elaboration.	<b>3</b> =Culminating presentation characterized by a straightforward but underdeveloped approach with some use of visual aids and generally a clear understanding and responsiveness to audience needs.
<b>2</b> =Incomplete demonstration of understanding resulting from an account that contains some sections with original insights supported with adequate evidence, while many aspects need much more development and evidence to make a convincing, complete, and insightful argument.	<b>2</b> =Composition is somewhat superficial in its approach, with a tendency toward summary and highlights with little attention to original analysis and much greater attention required to supporting details, relevant evidence, and coherence of organization.	<b>2</b> =Culminating presentation was brief and lacked overall evidence of attention to the needs of your audience; there was little use of visual aids to lend coherence to your organization; and there was a consistent need for further explanation and elaboration through supporting evidence.
<b>1</b> =Little evidence of deep understanding with a generally superficial account that tends to summarize rather than analyze key ideas; many aspects of the argument are sketchy or undeveloped, with little if any attention to balanced and reliable evidence to support claims and assertions.	<b>1</b> =Composition is extremely superficial in its approach to presenting and supporting an original thesis and related supporting evidence and claims; little evidence of original analysis or insights; and overall writing is poorly organized with little if any attention to an overall organizational plan or use of transitional expressions.	<b>1</b> =Culminating presentation was inadequate, lacking any attention to the needs and background of your audience. You consistently summarized your ideas with no attention to the need to support and express them with power or conviction. No evidence was present of the need to organize your information and claims visually.

## Sample Analytic Scoring Guide

Scoring Element	Performance Indicators	Assigned Point Value
<b>I. Demonstration of Understanding:</b>		
	<b>A. Explanation:</b> Supporting claims and assertions with valid and reliable evidence.	<b>5</b>
	<b>B. Interpretation:</b> Constructing meaning through valid inferences and generation of new ideas and products.	<b>5</b>
	<b>C. Application:</b> Using knowledge and skills in new, original, and unpredictable ways.	<b>5</b>
	<b>D. Self-Knowledge:</b> Expressing the ability to reflect, revise, rethink, and refine.	<b>5</b>
<b>II. Quality of Written Expression:</b>		
	<b>A. Organization:</b> Clarity and coherence resulting from attention to organizational structure and transitional devices.	<b>15</b>
	<b>B. Development:</b> Support of claims and assertions with logical, valid, and thorough evidence.	<b>15</b>
	<b>C. Voice:</b> Communication of a personality or sense of an original authorial tone.	<b>5</b>
	<b>D. Editing for Correct Grammar and Usage:</b> Use of conventions of Standard English.	<b>5</b>
	<b>E. Sentence Structure:</b> Variety and grammatical accuracy of sentence construction.	<b>10</b>
<b>III. Oral Presentation:</b>		
	<b>A. Attention to Audience Needs:</b> Clear and consistent sensitivity to audience background and responses.	<b>5</b>
	<b>B. Development and Support:</b> Appropriate and full-developed support for claims and assertions.	<b>10</b>
	<b>C. Organization:</b> Coherence and attention to transitioning and overall organizational flow.	<b>10</b>
	<b>D. Projection and Non-Verbals:</b> Use of voice, physical gestures, and eye contact.	<b>5</b>

**TOTAL:** \_\_\_\_\_

**Tool Thirteen: Portfolio Assessment**

**KEY ELEMENTS OF AN EFFECTIVE  
STUDENT PORTFOLIO**

- I. Student Work Products and Artifacts Representing All Facets of Standards Mastery**
  
- II. Self-Selected Work Products and Artifacts That Demonstrate Student Self-Knowledge and Self-Reflection**
  
- III. Ongoing Reflections and Analyses by Student Related to Continuous Progress**
  
- IV. Periodic Self-Evaluations Using Consensus-Driven Rubrics and Related Scoring Tools**

**Tool Sixteen: Strategies for Expanding  
Parent and Community Understanding of the  
Assessment and Evaluation Process**

**A Consensus-Building Matrix**

<i>To what extent do we...</i>	<b>Consistently</b>	<b>Sometimes</b>	<b>Seldom</b>	<b>Never</b>
1. Demonstrate the need to involve parents actively in their children's education?				
2. Work collaboratively to create a genuine community of learning in all classrooms and in our overall school?				
3. Support parents and community members to understand the significance of assessment and evaluation?				
4. Provide ongoing training opportunities for families to understand our testing programs and their instructional implications?				
5. Work closely with parents to ensure that they understand our grading procedures?				
6. Offer suggestions throughout the school for parents to help their children improve their achievement and grades?				
7. Ensure that grades and assessment in general require multiple forms of evidence, not just tests and quizzes?				
8. Share student work products and portfolios with parents throughout our school year?				
9. Use our web site, newsletters, and other communication tools to help parents participate actively in our assessment process?				
10. Make certain that in grading and reporting, we are in consensus about information we wish to communicate, who our primary audience is for that message, and the results we hope to attain?				

## **Tool Seventeen:**

### **Creating a Vision for Instructional Leadership and the Assessment Process in 21<sup>st</sup> Century Schools**

***As an instructional leader, how well does your school  
or district address each of the criteria below?***

1. ***Assessment and evaluation processes must be aligned with consensus-driven standards understood by all district and school stakeholders.***
  - ❑ We have consensus-driven content standards that articulate what all students are expected to know, be able to do, and understand as a result of our instructional program.
  - ❑ We have reframed these content standards into performance standards and indicators to describe acceptable and superior levels of performance for each course, grade level, and grading period.
  - ❑ We have put in place a feedback-adjustment process in which we use benchmark assessments to monitor how well students achieve proficiency relative to designated performance standards and indicators.
  - ❑ As a result of this process, we have disaggregated performance data to determine how various sub-groups (e.g., gender, race, ethnicity, socio-economic) are doing in relationship to mastering our content and performance standards.
  
2. ***Staff members must work together to unpack standards and determine what they mean for student knowledge and understanding.***
  - ❑ As an instructional leader, I work closely with staff members to build consensus about what our standards imply about student achievement expectations and related instructional interventions.
  - ❑ We reinforce a community of inquiry and learning among our staff through the use of study groups, inquiry teams, and action research cohorts to study, solve, and action plan in response to student achievement issues and problems.
  - ❑ The result of these efforts is a successful ability on the part of all staff to explain and “unpack” our standards for our students, ensuring that we achieve maximum levels of student achievement and standards mastery.
  - ❑ At each grade level and within each content area, staff teaching the same subject or grade are in consensus about what their students should know, be able to do, and understand as a result of instruction during a particular grading period.

3. ***Content standards must be clearly and effectively aligned with purposeful performance indicators and benchmark assessments that comprise the school or district's assessment system.***
  - ❑ As an instructional leader, I demonstrate an ongoing commitment to helping all staff members translate content standards into meaningful performance indicators and appropriate related instructional interventions.
  - ❑ I actively facilitate staff-driven assessment benchmarking, with meaningful summative assessment tasks and processes used jointly by teachers within a content or grade level to generate student achievement data.
  - ❑ Based upon aggregate and disaggregated student achievement data generated through our assessment benchmarking process, we generate extensive feedback about student competency and adjust our instructional programs accordingly.
  
4. ***Students must play an active role in their own assessment and evaluation process, building capacity for self-regulation and self-assessment as they progress through their years in school.***
  - ❑ As an instructional leader, I play an active and continuing role in helping all students to play an active role in the assessment and evaluation process.
  - ❑ Our students do not perceive grading as “something done to” them.
  - ❑ Our students are encouraged consistently to self-evaluate and reflect on their progress throughout a grading period, semester, and year.
  - ❑ I help staff members to integrate on a regular basis a variety of reflective assessment tools and processes, including reflective journals, think logs, evaluation processes, peer response groups, KWL activities, and think-pair-share strategies.
  
5. ***No single assessment tool or process should dominate an effective assessment system: educators need to use a range of assessment strategies and processes to build a photo album rather than a snapshot of student achievement.***
  - ❑ All teachers emphasize a “photo album” approach to collecting assessment and evaluation evidence, rather than a single-faceted “snapshot.”
  - ❑ Our entire staff understands the instructional implications of our high-stakes accountability testing programs and addresses them appropriately.
  - ❑ All teachers include constructed-response performance items on a regular basis as part of their test and quiz design.
  - ❑ Reflective assessment and student self-evaluation are an integral and consistent part of our assessment program.
  - ❑ All teachers use academic prompts to elicit performance task responses from our students, including a clearly-articulated format, audience, topic, and purpose for all performance-based assignments.

- At least once per grading period, all teachers engage students in independent projects that have authentic, real-world goals, roles, audiences, situations, products, performances, and standards.
- As a result of my support and leadership, we have an active portfolio assessment process operational in all classrooms and grade levels.

**6. *Parents and community members as well as students themselves need to play an active role in an effective and comprehensive educational assessment system.***

- As an instructional leader, I make certain that all key stakeholders, including parents, students, and community members, understand our assessment and evaluation system.
- Grading is a clear, coherent process at our school, with students actively involved in monitoring and understanding the criteria being used to evaluate them and their achievement.
- I work to ensure that parents and community members understand our content and performance standards.
- Parents and community members receive direct and ongoing training to understand the various forms of benchmarking and related accountability testing in use in our school or district.
- I work with parents and community members to understand the vital role played by a range of assessment tools in our school and district.
- Parents and community members understand the relationship between grading, assessment, and evaluation within our school and district.

## A Glossary of Assessment Terms

1. **assessment:** collecting data related to students' achievement based upon their completion of some form of test or performance-based activity.
2. **evaluation:** making judgments about the quality of student performance based upon consensus-driven standards and student achievement data.
3. **content standards:** statements articulating what students are expected to know, be able to do, and/or understand; typically, content standards describe student performance over time (e.g., at the end of a course, grade level, etc.).
4. **performance standards:** statements articulating specific behaviors students are expected to demonstrate in relationship to content standards at a particular point in their education.
5. **benchmarks:** assessment activities required of all students at key points in their education to ensure that they are mastering designated performance standards in order to confirm their ongoing achievement of designated content standards. (e.g., quarterly writing prompts; annual reading assessments)
6. **formative vs. summative assessment:** formative assessment can be both formal and informal and occurs throughout a period during a student's education; summative assessment is cumulative, occurring at key juncture points in a student's education.
7. **performance assessment:** assessment activities that require students to complete some form of performance (e.g., writing, observing, presenting) rather than selected-response testing (e.g., fill-in-the-blank, multiple choice, true-false).
8. **authentic assessment:** performance-based assessment that requires students to demonstrate their ability to perform in situations and settings that parallel "authentic," real-world professionals (e.g., comparing and contrasting primary source documents in history to draw conclusions about an historical event).
9. **rubric:** a scoring tool for performance assessment tasks that presents a series of numbered descriptions of student behaviors, organized in rank order; each descriptor summarizes a level of performance and the expected student behaviors for that level.
10. **feedback-adjustment process:** collecting and analyzing student assessment data to determine individual, sub-group, and full-group levels of achievement, with corresponding adjustments in teaching and learning activities to improve achievement on a continuous basis.