

## GETTING STARTED WITH THE SEPUP ASSESSMENT SYSTEM

### A LESSON PLAN FOR INTRODUCING ASSESSMENT TO STUDENTS

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Assign students to respond to a question or to complete a task that will be assessed. Try to be specific in describing your expectations. Review the Scoring Guide with your class. Work with your students so that they understand the Scoring Guide and are clear about the criteria for each scoring level. To do this, you may want to share an example of an acceptable response on another assessment on the same scoring variable. After students have completed the assignment, proceed with their introduction to the Assessment System by following these steps:

1. Instead of collecting their work, tell students that they are going to help you evaluate their responses.
2. Ask the students to brainstorm a list of what a perfect response for the given question would include. The list may be written on the board or in the students' notebooks. The list will serve as a supplement to the related Scoring Guide.
3. When the list is as complete as possible, work with the class to refine it to reflect the criteria you expect for a complete and correct Level-4 response. Instruct the students to use the final list as a checklist for scoring their own responses with the appropriate Scoring Guide. Have students work with partners but not reveal scores to their partners yet.
4. Ask students to trade papers with their partners and score their partners' papers.
5. Have students compare their own scores to those given by their partners. For a score partners do not agree with, explain that they will need to discuss the work, listen to each other's reasons for the given score, and then decide which score will be given. They will then mark the paper with the agreed-upon total score.
6. Have a class discussion on students' experiences in scoring the papers. Bring out the following ideas:
  - What was the score on students' papers? Did they get the score they expected before the scoring session began? Why or why not? Students who may have put their best effort into their responses might not have scored very well if they did not understand the criteria for the assignment. The idea is to reinforce the need to know the basis for the scoring of the assignment and the teacher's expectations for a complete and correct performance.

- By what criteria did students score their partners' work? Be sure that students used the Scoring Guide as intended (e.g., they did not mark down for grammar when using the EXP Scoring Guide). The class may come up with additional criteria after scoring the papers. This often happens if the class missed something important in the brainstorming.
  - Discuss the Scoring Guide: Would students make the generalized Scoring Guide more elaborate? more concrete? Do students need sample Level-4 responses to help them score? How might the teacher generate such Level-4 responses?
  - Discuss what happens when papers are returned: Should students keep a portfolio of papers? Can they redo assignments? The focus during the school year should be on progress, and the students' goal should be to improve with each assessment during the year.
7. Ask students to write in their science notebooks what they learned about assessments and how they will approach assessed tasks differently next time.

## HINTS FOR USING THE SEPUP ASSESSMENT SYSTEM

- When first using SEPUP materials, you may want to select only a limited number of assessments in the first unit or focus on just one or a few of the nine Scoring Guides.
- Teachers who have successfully used the SEPUP Assessment System strongly advise discussing the Scoring Guides with students early in the school year. This is important for two reasons: It clarifies scoring criteria, and it introduces students to the program's central concepts.
- Sharing the Scoring Guides does not give away the answers. Instead, it informs students of your expectations for their performances. If they know what is expected, they have a better opportunity to accomplish the performance goal within the particular learning context.

Teachers suggest:

- (1) giving students copies of the Scoring Guides to keep in their notebooks or journals.
  - (2) laminating a set of the Scoring Guides to post in the classroom for students' reference.
  - (3) sharing Scoring Guides and students' work with parents during conferences.
- Many teachers get a good sense of what to look for in students' responses if they write out their own Level-4 response before beginning to score their students' responses. Teachers have reported that this exercise is time well spent.
  - The SEPUP Assessment System is designed to track students' progress over the course of the year. In the beginning, do not expect performances at Levels 3 and 4. From unit to unit, scores will improve.
  - Provide feedback to students, either verbally or on their papers, to help them understand why they did not produce a Level-4 (complete and correct) response.
  - On occasion, students will try to make their answers look like a higher-level response without fulfilling the requirements for lower-level responses. Teachers may need to remind students that to achieve a higher score, they must first include all that was expected in the preceding score level(s).
  - If an assessment task can be scored with more than one Scoring Guide, it is possible for a student to receive different scores in different assessment areas. For example, on a question analyzing the data on the effects of force on the motion of a cart, a student may do well on the AID assessment but poorly on the COM assessment due to lack of organization and misspellings.

## ISSUES AND SCIENCE ASSESSMENT BLUEPRINTS

Assessment tasks are distributed throughout *Issues and Science* at opportune points. The Assessment Blueprints for each unit can be found in the Teacher Resources IV, “Unit Specific Resources.” These show the flow of assessments throughout each unit.

## SEPUP SCORING GUIDES

Analyzing and Interpreting Data (AID)

Communicating Concepts and Ideas (COM)

Constructing Explanations (EXP)

Developing and Using Models (MOD)

Engaging in Argument from Evidence (ARG)

Engineering Design Solution (ENG)

Evidence and Tradeoffs (E&T)

Organizing Data for Analysis (ODA)

Planning and Carrying Out Investigations (PCI)

## ENGAGING IN ARGUMENT FROM EVIDENCE (ARG)

### When to use this scoring guide:

This scoring guide is used when students are developing arguments about alternative explanations of scientific phenomena.

### What to look for:

- Response includes a clear and relevant claim
- Response includes sufficient evidence, including multiple lines of evidence when appropriate
- Reasoning is logical, sufficient, and connects the evidence to the claim, and uses relevant concepts and ideas

Level	Description		
	Claim	Evidence	Reasoning
Level 4 Complete and correct	The student's claim is clear and relevant.	The student's evidence supports the claim, is accurate and sufficient, and student evaluates the strength of the evidence in supporting the claim.	The student's reasoning is appropriate, logically connected to the claim, and sufficient.
Level 3 Almost there	The student's claim is relevant but incomplete.	The student's evidence is relevant, accurate, and sufficient.	The student's reasoning is appropriate and logically connected to the claim, BUT is not sufficient.
Level 2 On the way	The student's claim seems relevant but is unclear.	The student's evidence is relevant BUT is incomplete and/or contains inaccuracies.	The student's reasoning is scientific BUT is incomplete or not logically connected to the claim.
Level 1 Getting started	The student provided an irrelevant claim.	The student's evidence is irrelevant or does not support the claim.	The student's reasoning is nonscientific, does not logically support the claim, or does not connect the claim to the evidence.
Level 0	The student provided no claim.	The student provided no evidence.	The student provided no reasoning.
x	The student had no opportunity to respond.	The student had no opportunity to respond.	The student had no opportunity to respond.