Performance Assessments in Use Webinar

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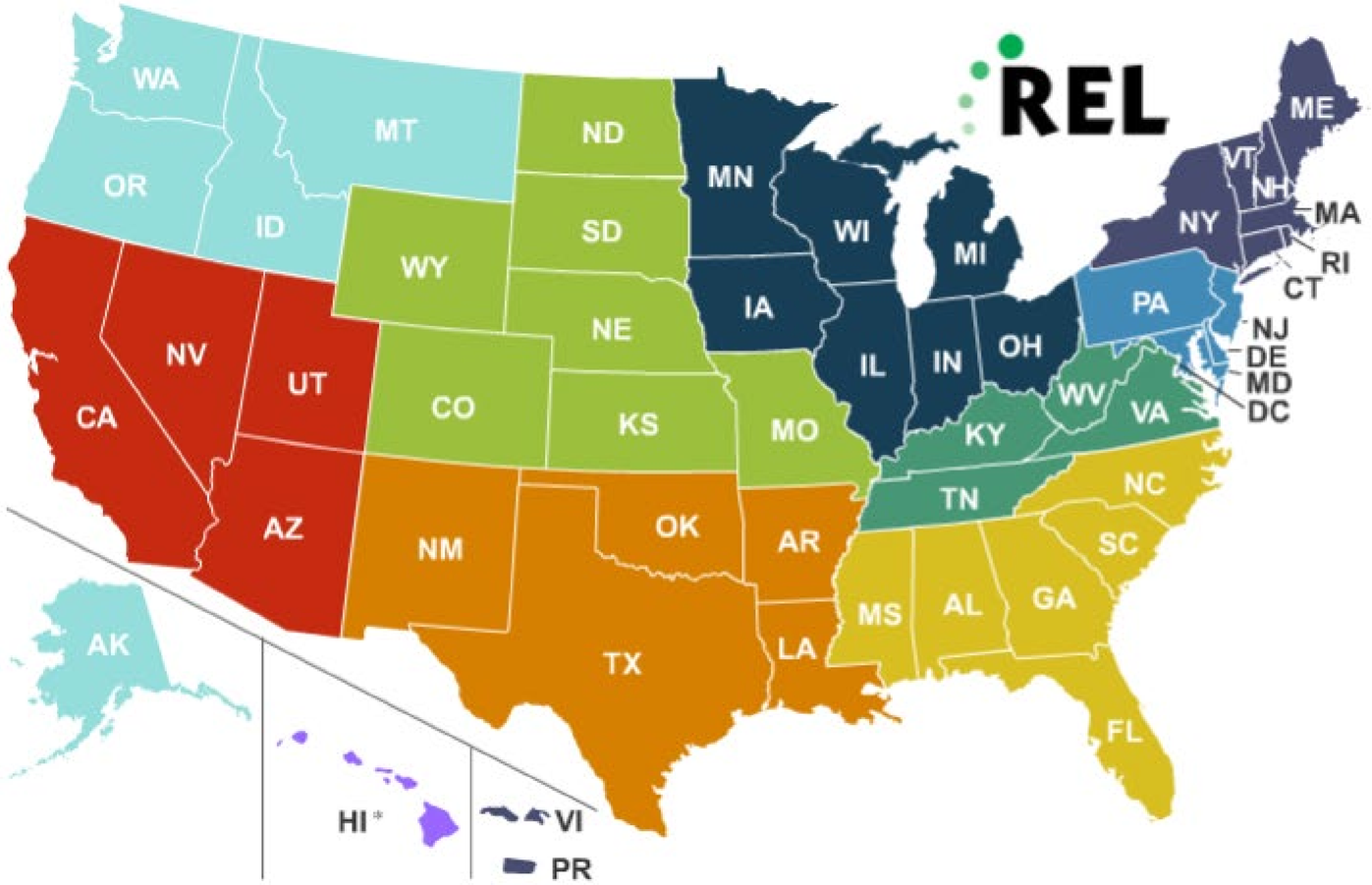

Appalachia
Central
Mid-Atlantic
Midwest
NE & Islands
NW
Pacific*
SE
SW
West

* The Pacific Region contains Hawaii pictured on the map and American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, & Yap), Guam, the Republic of the Marshall Islands, & the Republic of Palau not pictured on the map

The **10 RELs** work in partnership with stakeholders to **support a more evidence-based education system.**

Administered by the U.S. Department of Education, Institute of Education Sciences (IES)

Find us on the web! https://ies.ed.gov/ncee/edlabs/regions/appalachia/

Welcome and overview

Carmen Araoz
Project Manager

Emma Pellerin
Research Associate

Meet your facilitators

Carmen Araoz
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Jessica Bailey
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Education Development Center

Anne Petersen
Virginia Department of Education

Performance assessment implementation experts

Erin Lowery
Science Teacher
Prince William County Public Schools
Human Impact on Watershed Health in Grade 6

Carrie Roop
Science Teacher
Prince William County Public Schools
Science for Oceanography in Grade 5

Behind the scenes...

Elizabeth McBride
Education Researcher

Jennifer Powell
Science Coordinator
Arlington County Public Schools

Gina R. Townsend
Science Coordinator
Prince William County Public Schools

Implementing high-quality performance assessments in science: Webinar series

Maria Araya
7th-Grade Science Class
Dorothy Hamm Middle School
Arlington County Public Schools

Traci Holland-Shuford
7th-Grade Science Class
Thomas Jefferson Middle School
Arlington County Public Schools

Webinar #1: Introduction to Performance Assessments

August 4, 2020

Webinar #2: Performance Assessments in Use

August 11, 2020

Webinar agenda

- Welcome and overview (10 min)
- Review: Introduction to performance assessments (10 min)
- Teacher presentations: Examples from the classroom (20 min)
- Implementing performance assessments (10 min)
- Engaging students during performance assessments: Rubric types, features, and functions (10 min)
- Virginia Department of Education (VDOE) common rubrics (10 min)
- Using rubrics for effective feedback (15 min)
- Closing (5 min)

Session goals

- Identify and review the implementation process for performance assessments.
- Understand the importance of student engagement as part of administering performance assessments.
- Identify different types, features, and functions of grading rubrics used with performance assessments.
- Support educators' use of the Virginia common rubric when implementing performance-based assessments.
- Provide educators with resources and recommendations for administering performance-based assessments in distance-learning environments.

Review: Introduction to performance assessments

Kori Hamilton Biagas
Dissemination Lead

Jessica Bailey
Research Lead

IES Institute of Education Sciences

REL Appalachia at SRI International

Defining performance assessments

Performance Assessment

- Assessment blueprint
- Teacher instructions
- Rubric
- Performance task

Performance Task

- Prompt
- Student Instructions

Performance assessment implementation

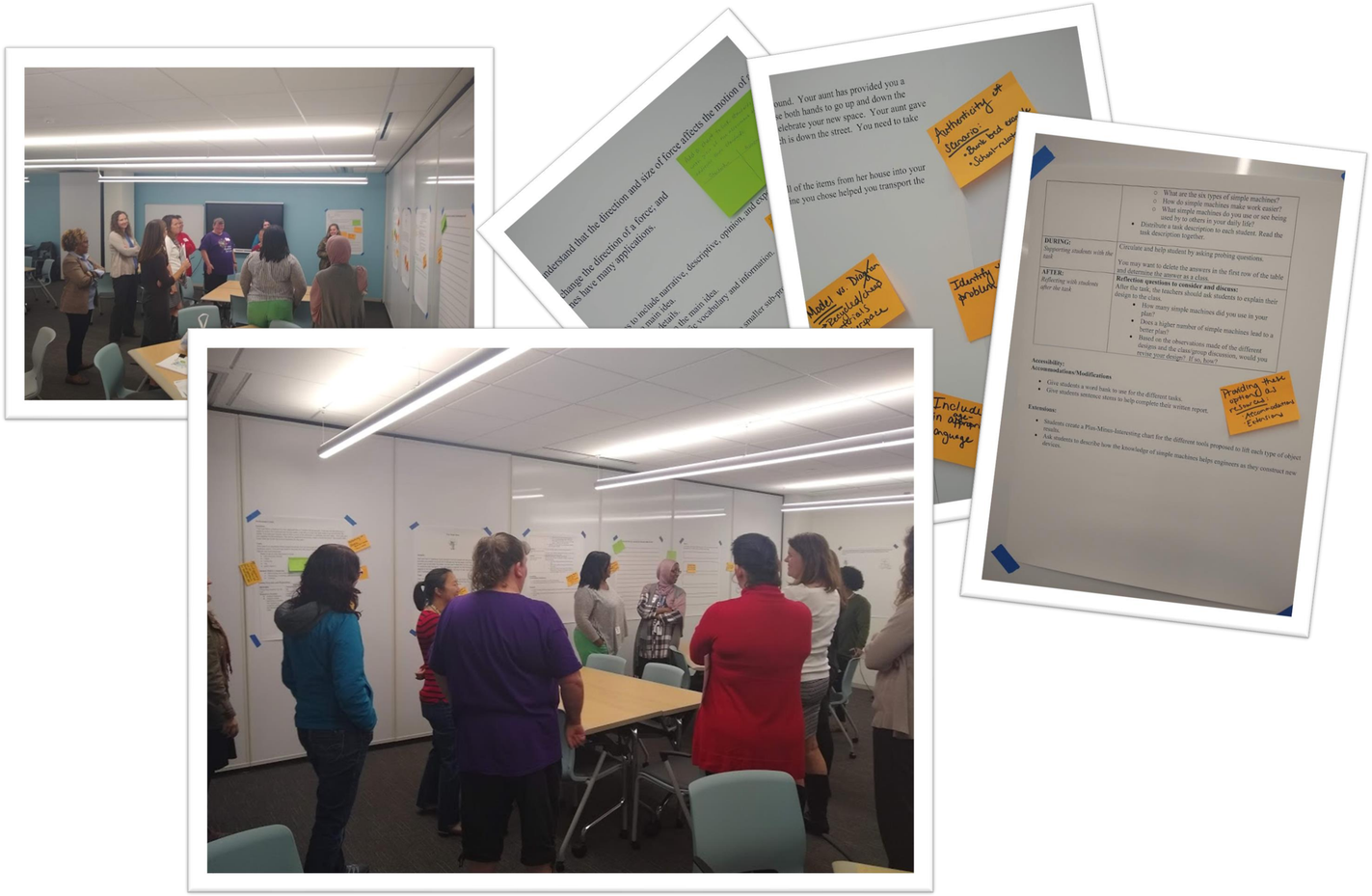
Benefits

- Assesses complex standards and skills
- Engages students
- Supports personalization
- Builds authentic experiences
- Provides formative and summative feedback

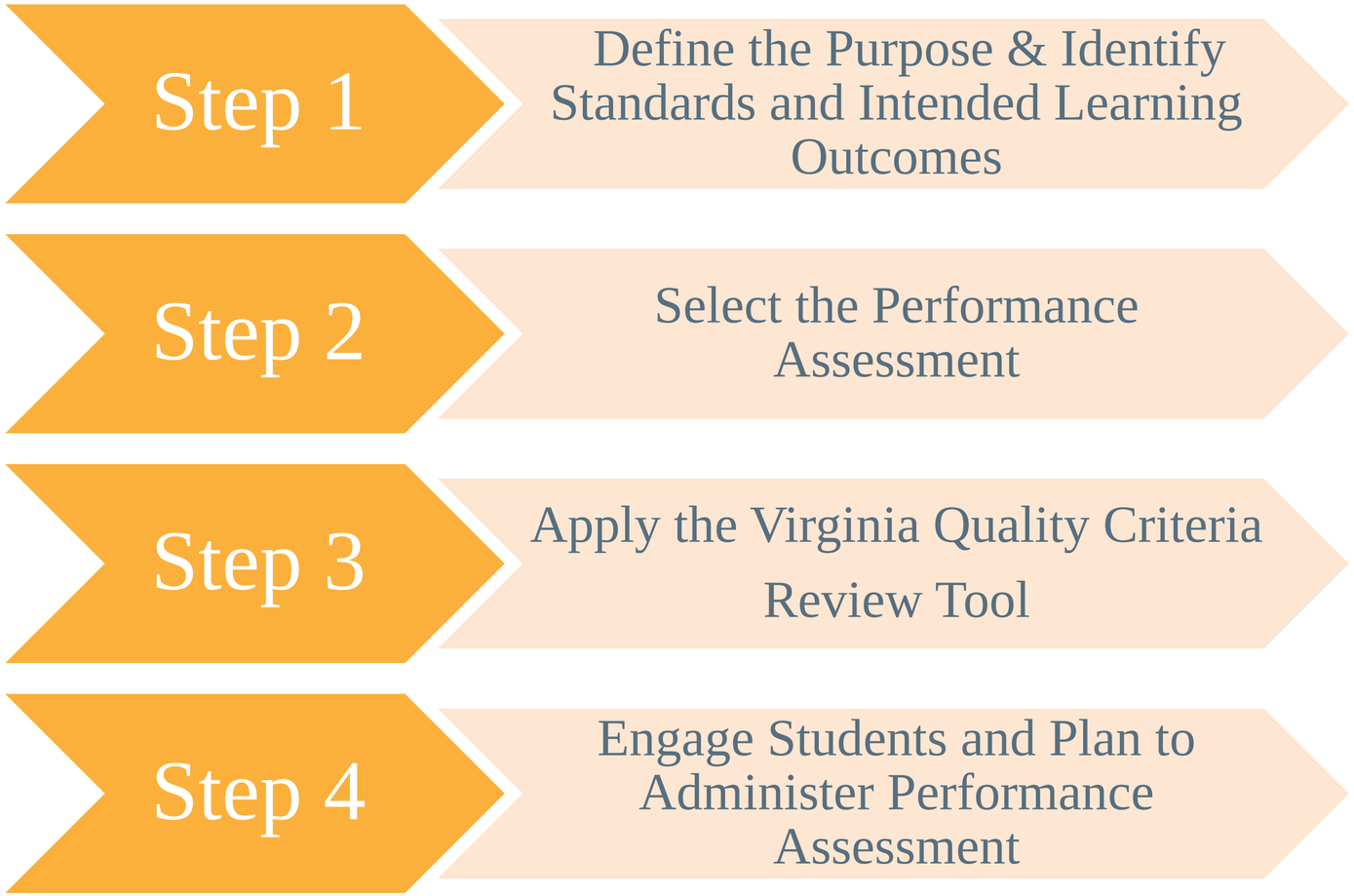
Factors to consider

- May take extra time to administer
- Requires significant teacher preparation
- Can be time-consuming to score/evaluate student performance

Implementing high-quality performance assessments in science



Four-step process for identifying and using performance assessments



Teacher presentations

Examples from the classroom

Carmen Araoz
Project Manager

Carrie Roop
Prince William County Public Schools Science Teacher

Erin Lowery
Prince William County Public Schools Science Teacher

Science for Oceanography

Carrie Roop

Science for Oceanography

Who:

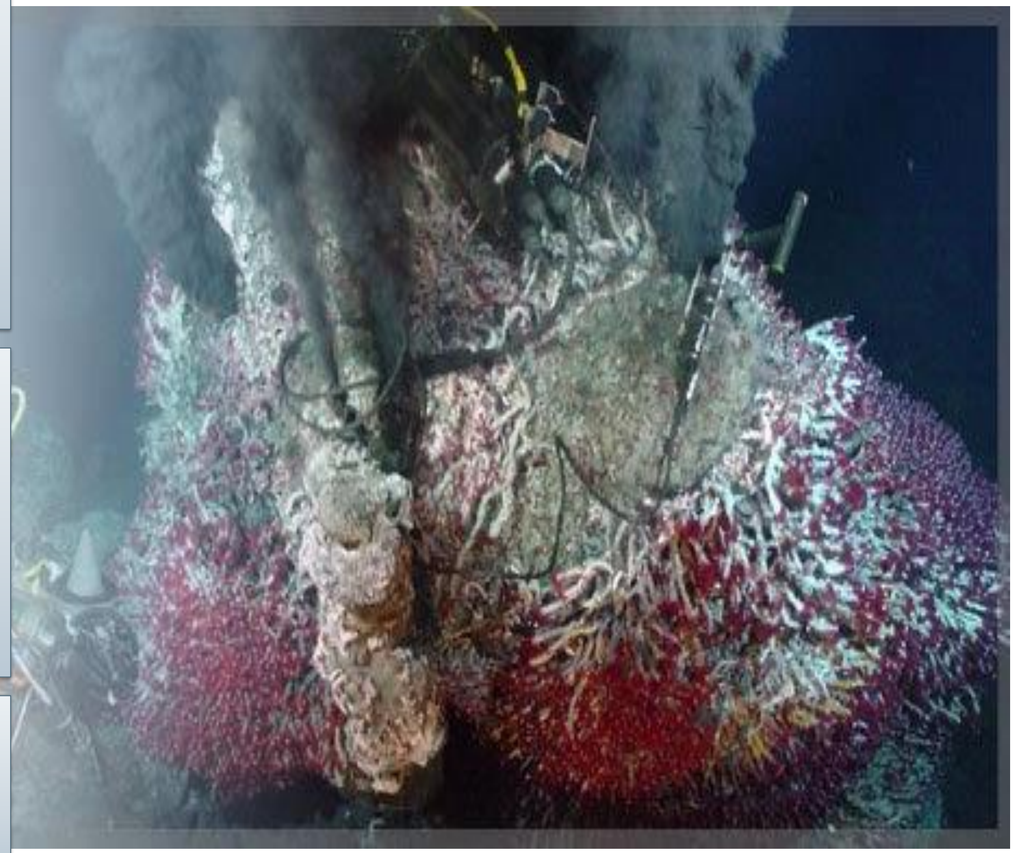
- 22 grade 5 students
- Levels 1, 3, and 6 English Learner (EL) students
- Students with disabilities

What:

- Standards of Learning (SOL) 5.6 on Oceanography
- SOL 5.1 on Communication

Duration:

- 5 days for the performance task



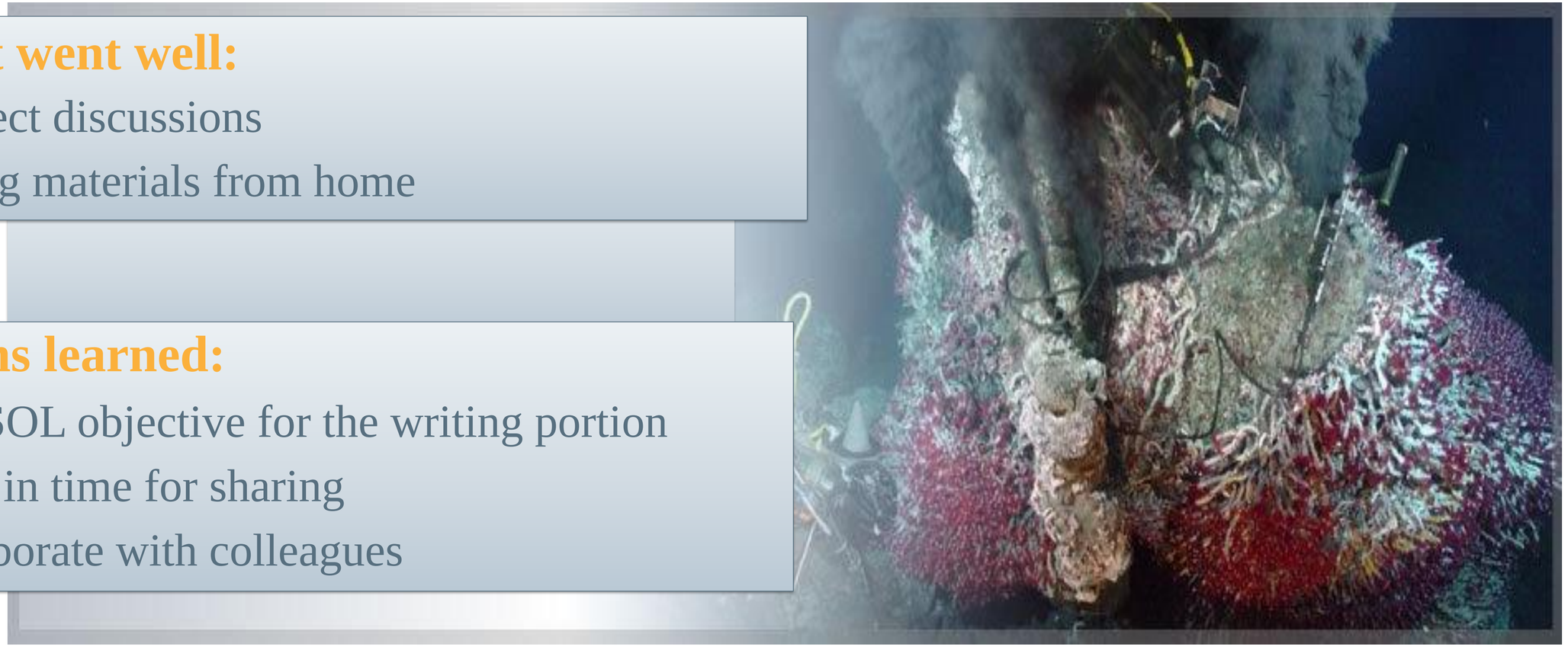
Science for Oceanography

What went well:

- Project discussions
- Using materials from home

Lessons learned:

- Add SOL objective for the writing portion
- Build in time for sharing
- Collaborate with colleagues



Human Impact on Watersheds

Erin Lowery

Human Impact on Watersheds

Who:

- 97 grade 6 students
- EL students
- General education students and students with disabilities
- Students Involved in Gifted Needs in Education Today (SIGNET students)

What:

- SOL 6.5 on Water Resources
- SOL 6.7 on Watersheds

Duration:

- 3.5 weeks

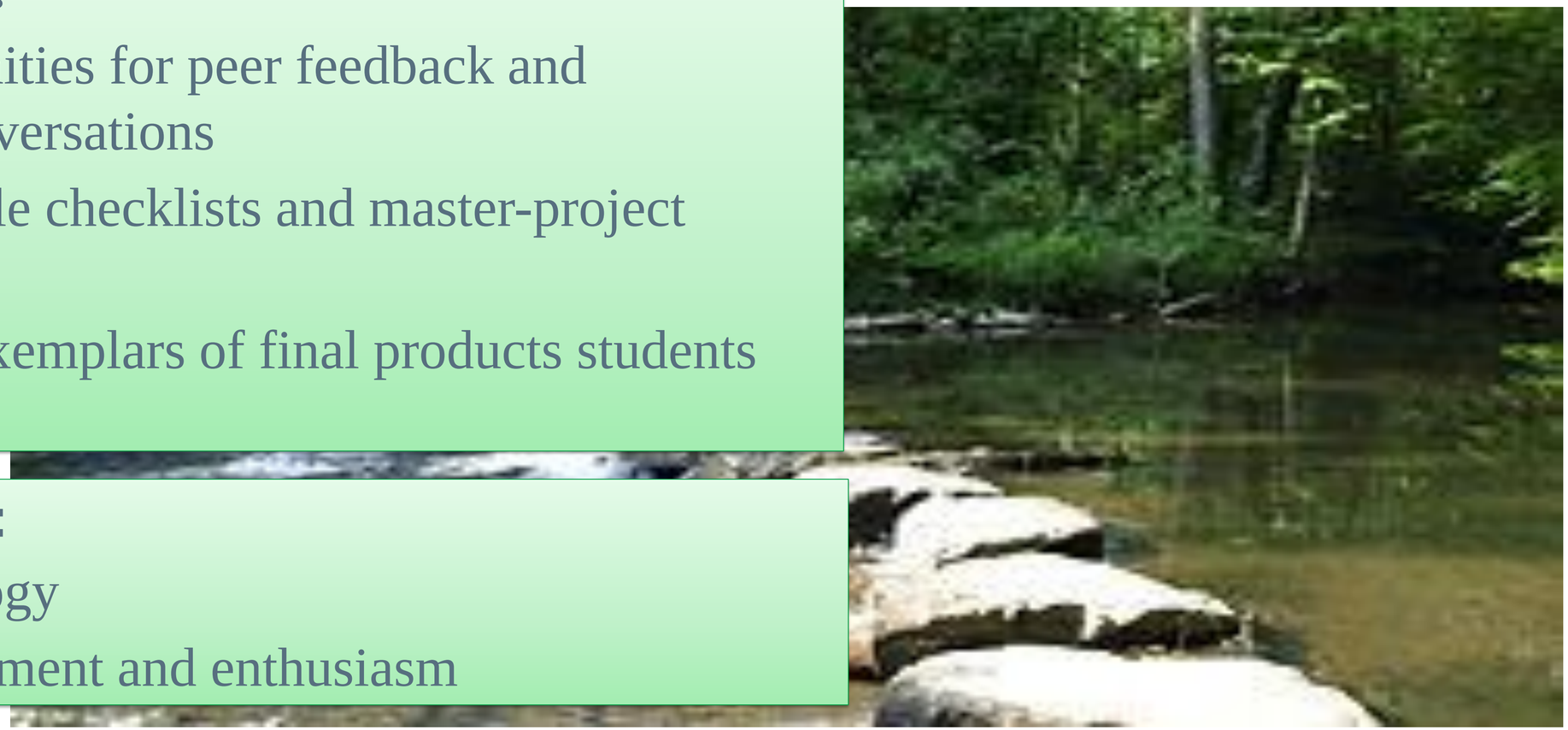
Human Impact on Watersheds

Lessons learned:

- Create opportunities for peer feedback and community conversations
- Develop multiple checklists and master-project timeline
- Provide more exemplars of final products students can create

What went well:

- Use of technology
- Student engagement and enthusiasm



Teacher Q&A

Questions? Our implementation experts are ready to share!

Implementing performance assessments

Kori Hamilton Biagas
Dissemination Lead

Carrie Roop
Prince William County Public Schools Science Teacher

Erin Lowery
Prince William County Public Schools Science Teacher

IES Institute of Education Sciences

REL Appalachia at SRI International

Step 4

Engage Students and Plan to Administer Performance Assessment

This step addresses the questions:

- How can I ensure that students are actively engaged in the assessment process?
- How much time and what resources are adequate for the classroom assessment?

Strategies for engaging students in assessment planning

Step 4

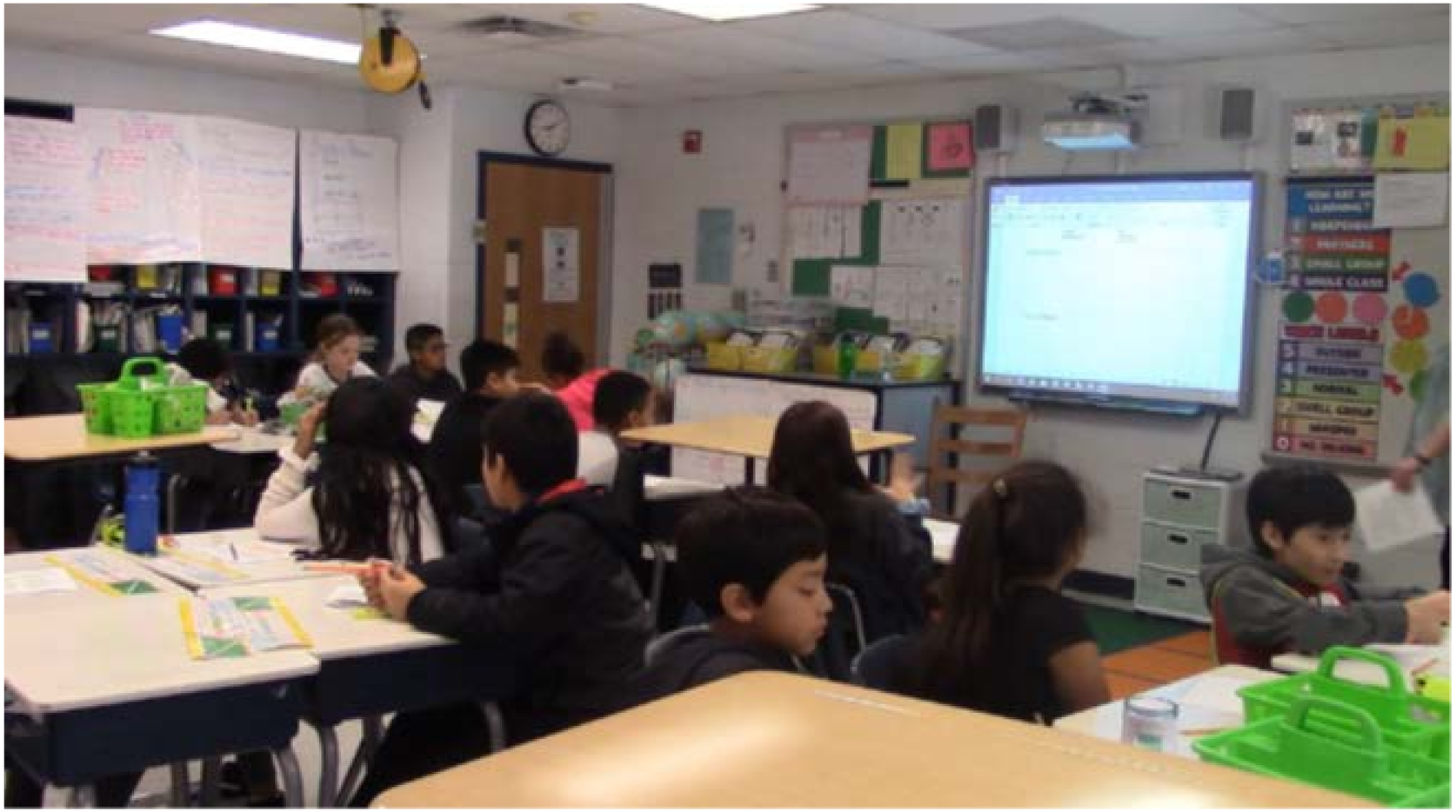
Student-led conferences

Self-assessments

Peer assessments

Student engagement

Step 4



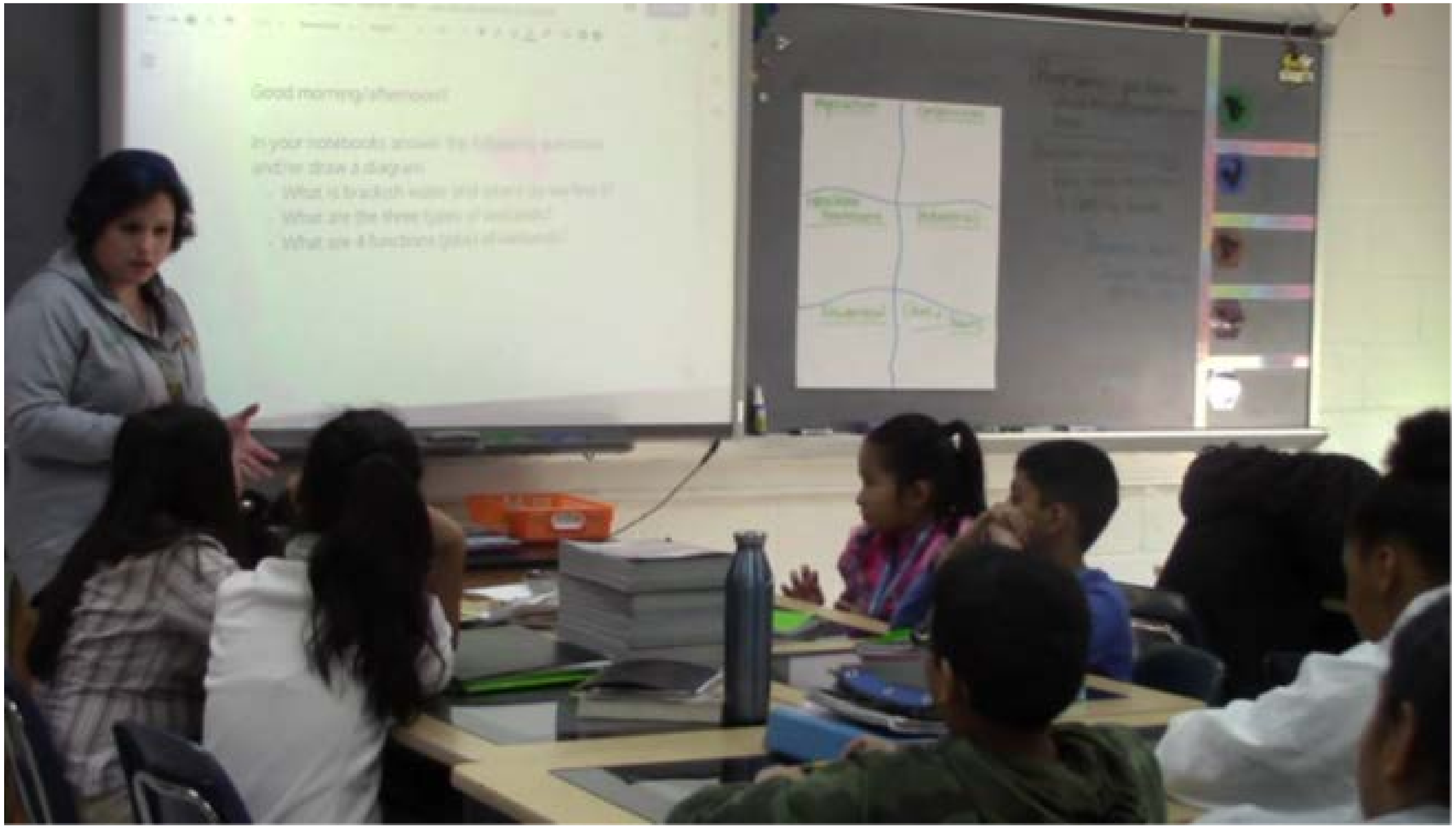
Assessment planning

Step 4

- Classroom assessment practices require adequate preparation.
- If we want students to benefit from the assessment experience, both teachers and students must adequately prepare for the assessment.
- When planning your assessment, consider:
  - Time
  - Assessment materials
  - Administration instructions
  - Evaluation materials

Assessment planning

Step 4



Engaging students during performance assessments

Rubric types, features, and functions

Jessica Bailey
Research Lead

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What is a rubric?

An evaluation tool (usually in a table format) that is used to assess student performance along a set of criteria.

Rubrics typically consist of two components:

- *Criteria* (the characteristics of good performance on a task).
- *Levels of performance* (the degree to which a criterion has been met).

Elements of a quality rubric

- Set expectations for students and focus on what is present, and not just what is absent.
- Communicate strengths and weaknesses while providing effective feedback directly related to student performance.
- Identify performance levels that are clearly distinguishable from one another.
- Provide formative and summative feedback.

Types of rubrics

Generalized rubric

- Applies essential criteria to evaluate several authentic, content-specific tasks or assessments.
- A single rubric can be used across different tasks, to ensure consistency.
- Feedback may not be specific to certain components of an assessment.

Task-specific rubric

- Applies essential criteria to evaluate a single content-specific assessment or task.
- Provides students with specific criteria to guide performance.
- Can be time-consuming to create and limits generalizability across assessments.

Generalized rubric example

- Addresses students' abilities to construct, use, and/or present an oral and written scientific explanation.
- Allows educators to provide consistent feedback.

	Below	Approaching	Meeting	Exceeding
Claim	The claim does not address the purpose of the lab, is unclear or incomplete, and does not address the critical content or concept of the lab.	The claim addresses the purpose of the lab but is unclear or incomplete and may be missing some critical content or concepts of the lab.	The claim addresses the purpose of the lab, is clear and complete, and contains all critical content or concepts of the lab.	The claim addresses the purpose of the lab, is clear and complete, and contains all critical content or concepts of the lab. In addition, the student includes original ideas or predictions.
Evidence	The evidence does not support the claim.	The evidence supports the claim, but data are unclear or incomplete.	The evidence supports the claim using clear and complete data.	The evidence supports the claim using clear and complete data. In addition, the student presents evidence comprehensively such as in a narrative or visual form.
Reasoning	The reasoning does not explain the connection between the evidence and the claim.	The reasoning explains the connection between the evidence and the claim but is unclear or incomplete.	The reasoning clearly explains the connection between all the evidence and the claim.	The reasoning clearly explains the connection between all of the evidence and the claim. In addition, the student includes original ideas or applications.

Task-specific rubric example

- Evaluates the accuracy of student models.
- Focuses explicitly on a standard of learning that the teachers wants to assess.

	Incomplete	Inaccurate	Somewhat Accurate	Mostly Accurate	Accurate
Accuracy	Response is incomplete, irrelevant, contains insufficient evidence to demonstrate understanding of the disciplinary core idea OR the student has failed to respond to the prompt.	Response indicates minimal understanding. Only one or two of the plates is drawn and both the labels and direction of motion are incorrect.	Response indicates errors or omissions. Two or three of the plates are drawn correctly. The labels are incorrect or the direction of motion is incorrect.	Response indicates minor errors or omissions. All three plates are drawn correctly but either the labels are incorrect or the direction of motion is incorrect.	Response demonstrates no errors or omissions. All three plates are drawn correctly and both the labels and the direction of motion are correct.

Virginia Department of Education

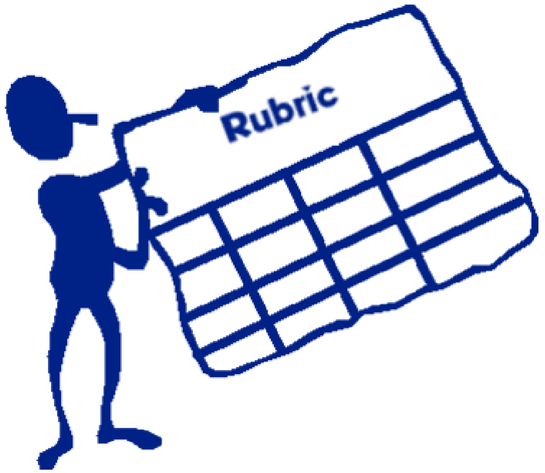
Common rubrics

Anne Petersen
Science Coordinator
Virginia Department of Education

Virginia Department of Education science common rubrics

Developed to support integration of the science and engineering practices into science concepts.

- **Grades 3–5**
  - – Scientific Investigation
  - – Design Challenge
- **Grades 6–8**
  - – Scientific Investigation
- **Grades 9–12**
  - – Scientific Investigation



Virginia Department of Education science common rubrics

Skill	Exceeds Expectations (4)	E/M (3.5)	Meets Expectations (3)	M/D (2.5)	Developing (2)	D/E (1.5)	Emerging (1)	Not Observed
Asking Questions and Defining Problems	Asks questions that require data to answer and evaluates the testability of the questions.		Asks questions that require data to answer.		Asks questions that can be investigated but do not require data to answer.		Asks questions that cannot be investigated.	
	Predicts an outcome that is directly related to the question and provides science-based support for the prediction.		Predicts an outcome that is directly related to the question.		Predicts an outcome that is indirectly related to the question.		No prediction was made or the prediction was not related to the question.	
Planning and Carrying Out Investigations	Designs procedures (individually or as a team) and uses appropriate tools to make accurate measurements.		Follows procedures (individually or as a team) and uses tools appropriately to make accurate measurements.		Follows procedures or uses tools inappropriately or does not make accurate measurements.		Does not follow procedures, uses tools incorrectly, or does not make accurate measurements.	
Interpreting, Analyzing, and Evaluating Data	Accurately represents data using data tables, charts, and/or graphs and includes supporting details (i.e. labels, units, titles).		Accurately represents data using data tables, charts, and/or graphs.		Partially complete or inaccurate placement of data in data tables, charts, and/or graphs.		Inaccurate or missing data tables, charts, and/ or graphs	
	Accurately analyzes or interprets information using a graph and/or table, identifies patterns in the data, and recognizes unusual or unexpected data.		Accurately analyzes or interprets information using a graph and/or table.		Analyzes or interprets information using a graph and/or table but makes minor mistakes.		Analyzes or interprets information using a graph and/or table but makes major mistakes.	
Constructing and Critiquing Conclusions and Explanations	Constructs or evaluates an explanation based on observations or laboratory evidence, relates it to scientific ideas or principles, and applies explanation to new contexts.		Constructs or evaluates an explanation based on observations or laboratory evidence and relates it to scientific ideas or principles.		Constructs or evaluated an explanation or evaluation of evidence that is supported by laboratory evidence but does not include scientific ideas or principles.		Constructs or evaluates an explanation that includes an irrelevant claim.	
Developing and Using Models	Makes accurate and labelled models (drawings, diagrams, or other) to represent the process or system and explains the model.		Makes accurate and labelled models (drawings, diagrams, or other) to represent the process or system.		Makes models (drawings, diagrams, or other) to represent the process or system investigated with minor errors.		Makes models (drawings, diagrams, or other) with major errors.	
Obtaining, Evaluating, and Communicating Information	Communicates accurate, clear, and complete information. Uses scientific terms and concepts accurately to support explanations.		Communicates accurate, clear, and adequate information. Use of scientific terms to support explanations is evident.		Communicates partially accurate and/or minimal information in explanations. Use of scientific terms in explanations is limited or partially accurate.		Communicates information that reflects inaccurate concepts. Use of scientific terms is inaccurate or absent.	
Content SOL_____	Explains and applies relative and accurate content.		Explains or otherwise applies relevant and accurate content.		Identifies or otherwise applies relevant content with minor errors or omissions.		Identifies or makes connections to irrelevant content OR relevant with major errors or omissions.	

Aligned to the 2018 Virginia Science Standards of Learning.

Supports the development of science and engineering practices.

Virginia Department of Education science common rubrics

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Planning and Carrying Out Investigations	Designs procedures (individually or as a team) and uses appropriate tools to make accurate measurements.		Follows procedures (individually or as a team) and uses tools appropriately to make accurate measurements.		Follows procedures or uses tools inappropriately or does not make accurate measurements.		Does not follow procedures, uses tools incorrectly, or does not make accurate measurements.	
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Intended to be used to track students' progress throughout the year and as a guide for instruction.

A single performance assessment is not intended to address all portions of the rubric.

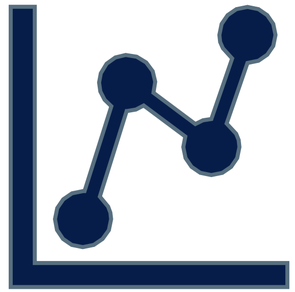
Using rubrics for effective feedback

Jessica Bailey
Research Lead

IES Institute of Education Sciences

REL Appalachia at SRI International

Using rubrics for effective feedback



Rubrics:

- Allow multiple evaluators, such as teachers and students, to apply the same criteria to evaluate an assessment.
- Enable teachers to provide students with formative feedback.
- Facilitate communication between teachers and students related to performance.
- Help teachers authentically monitor a student's learning process.
- Inform instructional practice by allowing teachers to modify future lessons based on student performance.

Using rubrics for effective feedback (continued)

Let’s talk: Using rubrics for effective feedback

- What was challenging about using rubrics?
- What have you found beneficial about using rubrics?

Tell us about your experiences when using rubrics for effective feedback in the chat!

Closing

Carmen Araoz
Project Manager

Emma Pellerin
Research Associate

We want to hear from you

- Please complete the stakeholder feedback survey.
- This survey will be sent to all participants.

Webinar resources available at:

REL Resources

- REL Appalachia: Implementing High-Quality Performance Assessment in Science
  - Participant workbook
  - Coaching materials

- REL Northeast and Islands: Creating and Using Performance Assessments: An Online Course for Practitioners

Other Resources

- Virginia Department of Education Performance Assessments and Local Alternative Assessments resource page

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Thank you!

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