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### Lesson Overview

In this lesson you'll be introduced to:

- the definition of important terms like performance task, deeper learning, performance assessment, and curriculum-embedded performance assessment (CEPA);
- the sequence of activities involved in a sample curriculum-embedded performance assessment (CEPA);
- characteristics of effective curriculum-embedded performance assessments (CEPAs);
- suggestions for teachers and instructional leaders to improve CEPA use; and,
- recommended activities and resources to deepen your understanding and use of CEPAs.

### Video Outline

- Introduction (00:00-02:20)
- Definitions (02:21-04:46)
- Activities in a Sample CEPA (04:47-07:05)
- CEPA Specifications (07:06-10:27)
- Summary: Putting it all Together (10:28-11:46)
- Tips for your Role (11:47-12:39)
- Activities and Resources (12:40-13:57)
  - Recommended Activities
  - Suggested Resources

**Your Learning Objectives**

*Record your objectives and points to focus on.*

**Your Stops**

*Make notes on stopping points and content discussion you would like the participants to take part in.*

Stopping Point	Content Discussion	Notes

**Suggested Discussion Questions**

- What are some strong arguments for involving students in performance assessments in school?
- What are some advantages curriculum-embedded performance assessments have over occasional use of performance tasks from external sources?
- What are reasons student work for CEPA summative purposes should be worth 20 or more points?
- What are some reasons CEPAs should require students to communicate through writing or oral presentations?

**Recommended Activities**

- Use the CEPA Specifications Checklist identified in the Suggested Resources to evaluate the Heat Transfer CEPA presented in this lesson. You can use the slides summarizing the CEPA activities in this lesson or the Sample CEPA Document cited in the Suggested Resources. Write a brief evaluative statement or paragraph summarizing your findings and expressing any other general thoughts you have about the CEPA.
- Work with your colleagues or teaching team members to develop a CEPA on an important topic you address in the course you teach. Produce a CEPA Document for your CEPA using

the Sample CEPA Document – Heat Transfer as a model. That sample is listed in the Suggested Resources. Use the CEPA Specifications Checklist to evaluate your CEPA. (This activity could take weeks, even months, to complete.)

### Suggested Resources

[Sample CEPA Document: Heat Transfer](#) from the Assessment Workshop

[CEPA Specifications Checklist](#) from the Assessment Workshop

MZD (2020). *The Power of Performance Assessments*. White Paper. Iowa City: MZD.

<https://mzdevinc.com/whitepapers/the-power-of-performance-assessment/>

Kahl, S. (2017). *Replace, don't add on: giving performance assessment a chance*. White Paper. Dover,

NH: Measured Progress. <https://www.assessmentworkshop.com/wp-content/uploads/2022/02/2018-19ALN-Kahl-Jan30-Replace-Dont-Add-On.pdf>

### Script

#### Slide 1

- Welcome to Lesson 9 on curriculum-embedded performance assessment.

#### Slide 2

- How many of us, as middle schoolers, were given the performance task of building a bridge using popsicle sticks and Elmer's glue? For those of us who were, it was probably a contest. The winning student or student team built the bridge that held the most weight before collapsing.
- Were the winners just lucky or did they apply a knowledge of the practical importance of the rigidity property of triangles? Or of strategies to redirect the force of gravity in weight-bearing structures? Or did all the contestants learn these as a result of the exercise? Were the kids asked afterwards what knowledge they applied or gained?
- It's likely none of these happened. Maybe there was some teamwork involved, and perhaps photos of the students' bridges were displayed on a bulletin board. But in many cases, the task was just a fun diversion from the tedious work of learning – one in which the opportunity for learning or for monitoring learning was missed.
- This lesson is about taking advantage of the opportunities performance assessment affords us to not only engage students, but also to engage them in deeper learning.

#### Slide 3

- The goals of this lesson are to provide teachers with:
  - an understanding of how curriculum-embedded performance assessments (or CEPAs) can bring together student engagement, foundational knowledge and deeper learning, and formative and summative assessment;
  - a knowledge of important characteristics of effective CEPAs; and,

- the motivation to make CEPAs an occasional, if not regular, mode of instruction.

#### Slide 4

- Part 1 presents definitions of important terms used throughout this lesson and points out some important distinctions.
- Part 2 summarizes the sequence of activities involved in a sample curriculum-embedded performance assessment.
- In Part 3, characteristics of effective CEPAs are discussed.
- Part 4 summarizes the “big ideas” presented in the lesson.
- Tips for teachers and instructional leaders offered in Part 5 are focused on the implementation of curriculum-embedded performance assessment in the classroom.

#### Slide 5

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#### Slide 6

- Many years ago, the term “performance task” referred to any test item or task that was not selected-response – in other words, an item asking students to write out their responses, no matter how short.
- Nowadays, we think of a performance task as a more extended “activity requiring students to create a significant product or performance demonstrating deeper learning.”

#### Slide 7

- Here’s a definition of deeper learning based on an early definition from the National Research Council. It stresses the application of knowledge and skills to complete complex tasks or solve real-world problems.
- More recently, the NRC expanded the definition to include the involvement of 21<sup>st</sup> Century cognitive skills, such as critical thinking, problem solving, and communication . . .
- and non-cognitive skills such as student self-direction and collaboration.

#### Slide 8

- Think back to Lesson 2 in which formative assessment was defined as a multi-step instructional process, as opposed to an evidence-gathering tool or technique such as a quiz or questioning technique.
- The same distinction applies here. A performance assessment is multi-step.
- Here are the steps:
  - A task is administered, engaging the students in some activity or experience.
  - The teacher evaluates the resulting student work products or performances.
  - And the evaluation information is used for formative or summative purposes.

Slide 9

- Take a look at this definition of a curriculum-embedded performance assessment. [PAUSE]
- As this definition implies, multiple performance tasks are integral parts of an instructional module or unit.
- This is very different from stopping instruction a few times a year to administer performance tasks from a task bank – tasks that are likely not closely aligned with instruction.
- Developing a CEPA can be straightforward, as we will see in the next section when we examine a sample CEPA.
- It's really just lesson planning involving a sequence of coordinated activities.

Slide 10

- In this part of the lesson, you'll see brief descriptions of the activities in a sample CEPA dealing with the science concept of heat transfer.
- We recommend you access the corresponding CEPA document from the suggested resources and refer to it in this section.

Slide 11

- The *Heat Transfer* CEPA is a sequence of six major activities requiring approximately one week (4 to 6 class periods and homework) to complete.
- The first activity has the students learn about the three methods of heat transfer. It involves group discussion and student-directed learning. [pause]
- Activity 2 has the teachers checking their students' understanding and involves the three important formative assessment practices of evidence gathering, feedback, and instructional adjustment.

Slide 12

- Activity 3 has small groups of students design and conduct experiments to determine which of two fabrics better protects against cold temperatures. The teacher provides some minimal feedback on the designs and identifies some of the materials that would be available for the experiments. This is an ungraded performance task.
- For Activity 4, the students describe their experiments to the class, and led by the teacher, there is discussion of the strengths and weaknesses of the experiments. Then the students individually write formal lab reports – graded summative products.

Slide 13

- For Activity 5, the teacher facilitates a class discussion of the many ways different methods of heat transfer were involved in the investigations. This has students reflecting on and reinforcing their learning.
- For Activity 6, the students individually research how a home heating system works. Then they write a paper describing the system and explaining how methods of heat transfer are involved. The paper is a graded summative product.

- More detail on this CEPA is provided in the CEPA document identified in the Suggested Resources for this lesson. This document includes:
  - information on curriculum standards addressed and specific concepts and skills covered,
  - detailed instructions for teachers, and
  - scoring rubrics.

#### Slide 14

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#### Slide 15

- Here and on the next two slides, some recommended specifications for CEPAS will be shown. Of course, a particular CEPA may not meet 100 percent of these specs, and teachers may want to add some of their own. The specs on this slide pertain to the curricular content of the CEPA.
- A starting point for the development of any lessons, instructional units, or assessment tools should be the curriculum standards to be addressed.
- Students need to have relevant foundational knowledge or basic skills before they can apply them. So the CEPA unit should either cover these if they are new to the students or review them if they have been covered in the past. The sample CEPA activities shown earlier assumes heat transfer is a new topic; whereas experimental design features and contents of lab reports could be either new or old topics.
- The performance tasks imbedded in a CEPA should require deeper learning, the application of basic knowledge and skills.
- Most, if not all, the CEPA activities should be engaging and reflect real-world problems or contexts.
- By their very nature, performance tasks are often interdisciplinary, but a main focus should be on curriculum standards in the teacher's discipline.

#### Slide 16

- The specs in this slide pertain to instructional activities.
- Group work has many advantages with respect to student learning. In addition, it fosters collaboration skills. Different roles for students within a group assure the meaningful involvement of *all students* in CEPA activities.
- Throughout a CEPA, students should be accessing a variety of resources – information sources, software, manipulatives, etc.
- Some learning activities should involve technology – for example, the internet.
- Students should be engaged in some form of research – some activities requiring them to find information, generate data, etc., and be at least somewhat self-directed in doing so.
- Self-initiated planning, information management, and interaction with resources are expectations consistent with previous specifications.

#### Slide 17

- The specs shown here pertain to assessment-related activities.
- As explained in Lesson 2, formative assessment activities should be planned components of lessons. They include checking students' understanding of concepts and skills *during* the learning.
- Performance tasks should generate student work products or performances that reflect deeper learning and are scorable for summative purposes.
- Student work scored for summative purposes should be the work of students individually, not group work. Multiple pieces of summative work gathered during a CEPA should, in aggregate, be worth many points – 20 to 30 perhaps. The point range should reflect the amount of evidence of learning obtained.
- Students should be asked to demonstrate communication skills through written reports, oral presentations, etc. resulting from the performance tasks.
- Technology may be used for evidence-gathering. For example, student work can be electronically submitted to teachers or shared with other students.

#### Slide 18

- As defined earlier, curriculum-embedded performance assessments are instructional units consisting of instructional and assessment activities.
- They include performance tasks as integral parts of the units.
- Probably the best two arguments for the use of performance tasks are that
  - 1) they tap deeper learning that is so often neglected by other types of assessment items and tasks and
  - 2) they can be very engaging for students.

#### Slide 19

- Curriculum-embedded performance assessments can do a lot more. CEPAs that meet the specifications presented in this lesson pull together a lot of desirable features of effective teaching and learning.
- They address important curriculum standards, covering foundational knowledge and skills, but also fostering deeper learning.
- They promote and measure 21<sup>st</sup> century skills such as problem solving, critical thinking, communication, collaboration, and self-direction.
- They involve both formative and summative assessment.
- They make good use of technology, and
- They can engage ALL students.

#### Slide 20

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#### Slide 21

- Teachers, if you want to do more in the way of curriculum-embedded assessment, these tips lay out some steps you might follow to “ease into” it. Take a look at them now and get started.

### Slide 22

- Instructional leaders and administrators, the first tip suggests a way the CEPA specifications presented in this lesson might play a part in teacher evaluations. [*pause*]
- The second tip, consistent with tips in previous lessons, deals with your role as an instructional leader in the functioning of teacher teams – in this case, the work of teams on the development of CEPAs. [*pause*]
- Collaboration across teams is the goal of the third tip, which calls for the sharing of CEPAs with other teams.

### Slide 23

- Use the CEPA Specifications Checklist identified in the Suggested Resources to evaluate the Heat Transfer CEPA presented in this lesson. You can use the earlier slides summarizing the CEPA activities in this lesson, or the Sample CEPA Document cited in the Suggested Resources. Write a brief evaluative statement or paragraph summarizing your findings and expressing any other general thoughts you have about the CEPA.
- Work with your colleagues or teaching team members to develop a CEPA on an important topic you address in the course you teach. Produce a CEPA Document for your CEPA using the Sample CEPA Document – Heat Transfer as a model. That sample is listed in the Suggested Resources. Use the CEPA Specifications Checklist to evaluate your CEPA. (This activity could take weeks, even months, to complete.)
- BE AWARE that a CEPA that you develop should ultimately replace a unit on the topic you have taught before. It is not an “add on” unit.

### Slide 24

- The first two resources listed are the ones to be used in the Recommended Activities for this lesson.