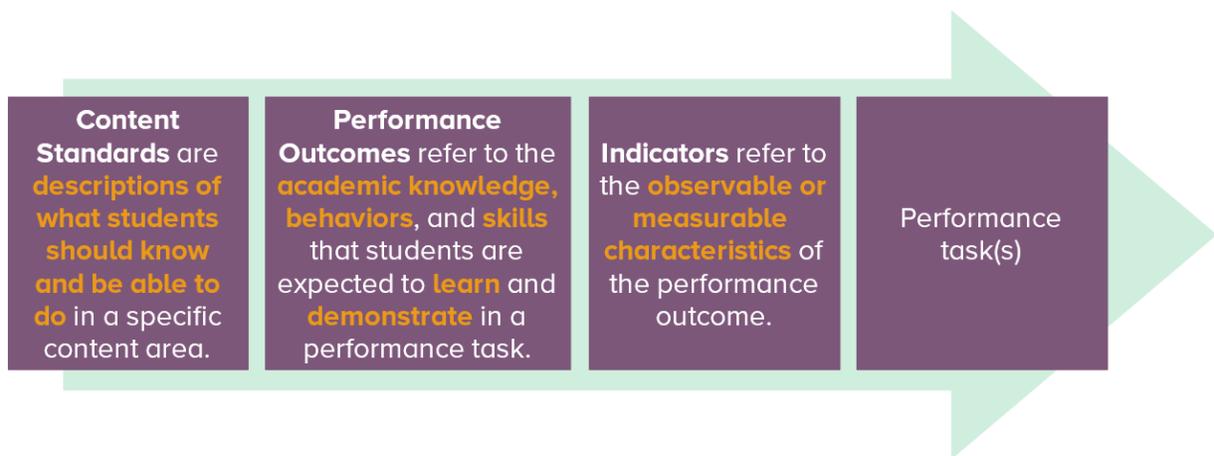


Steps to identify and create performance outcomes

This graphic illustrates the steps that lead up to the creation of a performance task. Content standards are the starting point that are used to develop performance outcomes, which are further delineated into indicators. The steps below present how to identify and create performance outcomes and indicators.



STEP 1: REVIEW SOURCE MATERIALS

Review appropriate source documents, such as content standards, to identify important content and skills to teach and assess.

The first step in developing an assessment is to review the standards that are guiding your instruction to identify the most important content and skills that you are teaching and want to assess. You also want to see whether performance outcomes are included with the standards or whether you'll need to create your own.

For example, an agricultural science teacher looked at the state's agricultural standards to identify the priority content to teach and assess, and chose to focus on *scientific investigations in agriculture*. Using the standards and instructional materials, the teacher created a master list of all of the prioritized content to be taught and assessed.

When decisions must be made about curriculum, instruction, and assessment, this prioritized list of content serves as the basis for defining specific performance outcomes.



STEP 2: UNDERSTAND THE STANDARDS

Once you have identified the standards, the next step is to unpack the standards to fully understand their expectations and level of rigor. This process typically involves visualizing students along the learning trajectory, carefully analyzing the standards' language, and considering implications for instruction and assessment.

a. Visualize students along the learning trajectory.

This process of visualizing students along the learning trajectory involves thinking about varying levels of demonstration of the standards. The levels are recorded on a continuum, ending with what successful demonstration looks like. This can be done by considering the question:

What should students know and be able to do to successfully demonstrate their knowledge and skills pertaining to the standard?

For example, the agricultural science teacher recorded his thoughts on a continuum of understanding, such as emerging, maturing, and consolidated, which is an example of a continuum that emphasizes a progression of development. This teacher determined that students who have an emerging understanding of skills related to *scientific investigations in agriculture* can identify a problem and begin to formulate a hypothesis, but struggle to design and conduct an experiment. On the other hand, those who have a consolidated level of understanding and skill can undertake an investigation from start to finish, including analyzing data and drawing conclusions.

b. Analyze the language.

The next step is to analyze the language of the identified standards and closely consider the knowledge, concepts, skills, and processes to measure, by focusing on the nouns and verbs. Then, use the nouns and verbs to determine what needs to be taught, practiced, and assessed.

For example, for the agriculture standard *scientific investigations in agriculture*, the sub-standards include the following directions:

- List the steps of the scientific method
- Explain the steps in conducting research in agriculture, and conduct an appropriate research project

The nouns in the sub-standards include **steps**, **scientific method**, **agriculture**, and **research project**. The verbs include **list**, **explain**, and **conduct**.

The teacher plans to teach the steps of the scientific method in agriculture and to give his students opportunities to conduct research projects.

c. Consider implications for assessment.

Next it is important to consider implications for assessment, such as strategies, tools, and/or resources needed for the assessment. For example, the agriculture teacher is going to use an extended performance assessment that involves students going into a field as a strategy to assess students conducting an applied research project.

He knows that students will need tools to conduct their research, including trowels, notebooks, pencils, and rulers to complete the task. He also knows that students may need to visit the field on more than one occasion, and will plan his lessons accordingly.

STEP 3: WRITE TARGETED PERFORMANCE OUTCOMES with CLEAR INDICATORS

This step calls attention to two important points: writing targeted performance outcomes that focus on students' demonstration of knowledge and skills, and using observable action verbs in the indicators.

a. The outcomes should focus not on instructional activities but on demonstration of knowledge and skills.

This step entails writing the performance outcomes. Performance outcomes are derived from content standards and represent the academic knowledge, behaviors, and skills that students are expected to learn and demonstrate in a performance task. In our example, the agricultural science teacher wrote statements based on the successful learner he visualized, and he made sure to write the statements in a way that included both the knowledge (or nouns), such as *methods of research*, and the skills (or verbs), such as *explain* or *conduct*. For example, his performance outcome statements for the topic of scientific investigation in agriculture are:

The students will explain methods of research in agriculture.

The students will design and conduct basic agricultural research.

The students will orally report on findings from research.

Using the soil taxonomy system, students will classify soil samples in a wheat field.

b. The indicators should use observable action verbs.

The final part of this process is to write indicators as clear, unambiguous statements with observable action verbs. Indicators refer to the observable or measurable characteristics of the knowledge, behaviors, and skills that students are expected to demonstrate in a performance task. The indicators break down the performance outcome into concepts students need to know, understand, and demonstrate. The following table provides a list of strong action verbs.

Verbs	Example
Identify	Identify the steps of the scientific method.
Define	Define “research,” “hypothesis,” and “agriculture.”
Provide	Provide examples to distinguish between nutrition requirements of plants and animals.
Describe	Describe the life cycle of a plant.
Explain	Explain pollination.
Create	Create a course of action for the person described in the scenario.
Calculate	Calculate the square root of 144.
Follow	Follow rules while driving.
Use	Use the scientific method to conduct an experiment.
Deduce	Deduce the geometric proof using the Pythagorean Theorem.