



## Pre-Assessment Fundamentals

Pre-assessment is a way to gather evidence about students' pre-requisite knowledge, skills, and understandings needed to access the concepts in the next unit of instruction. Pre-assessments are a part of the formative assessment process, providing feedback to teachers and students about critical skills needed prior to new learning. Pre-assessments are a way to collect information about what students already know and can do to reveal gaps or misconceptions that must be addressed. In this way, pre-assessments can prime future learning.

Before designing or using pre-assessments, it is important to understand the difference between assessing for what students *already know* versus only looking for what they *don't know*. Students enter the classroom with rich funds of knowledge or a collection of knowledge based on their prior learning, cultural practices, and daily routines. In other words, students do not enter the classroom as empty vessels. Seeking out these funds of knowledge offers teachers a chance to have a more complex view of what students know and can do to identify the assets students bring into the classroom.

Pre-assessment is not a traditional pre-test like an end-of year or unit test used at the start of instruction. Using an end-of-year test at the beginning of the year or unit reveals a lot about what students do *not* know about the unit or course content and little about what they do know. For example, if a teacher gave an end-of-year physics test to incoming physics students, the only information gained is that the students know very little about physics. However, if the teacher really wanted to find out about students' developing understandings relevant to a particular concept or upcoming unit/lesson of instruction in physics, they would select or design a pre-assessment to reveal this information.

Pre-assessment is critical to learning acceleration because it allows the teacher to utilize "just in time" instruction rather than remediating prior grade level standards separate from grade level work. Pre-assessments can improve learning by helping the teacher decide where to begin grade-level instruction while scaffolding in necessary previous grade expectations.

## Characteristics of High-Quality Pre-Assessments

1. Pre-assessments should align to and cohere with an underlying **theory or model of learning** (emphasizing application and understanding over memorizing discrete knowledge and isolated skills).
2. A good readiness pre-assessment should reveal **significant differences** in the pre-requisite knowledge, skills, or conceptual understandings of students.
3. A pre-assessment does not need to be long or complicated to achieve this goal, but it does need to be **thoughtfully designed to produce information with predictable instructional implications**.

## Assumptions

The use of pre-assessment assumes high-quality units of instruction are designed and used to plan instruction. This allows pre-assessment results to inform the unit-plan design process by providing evidence showing what needs to be taught, to whom, and how learning experiences can be differentiated to ensure all students gain an understanding of the big ideas and important understandings in the unit that students should be able to retain.

## Pre-assessment fundamentals

1. **Make student thinking visible** (capture their reasoning) in relation to important goals of the unit and/or crucial pre-cursor knowledge, skills, and understandings.

Multiple-choice and true/false items do not usually lend themselves well to a pre-assessment unless students are prompted to explain, defend, or justify their choices. Well-designed multiple choice items can provide insight into students' general misconceptions. Student reasoning can also be captured through a short, purposeful conversation, especially if writing is not what you are focusing on.

2. Pre-assessment questions should be limited to those that have **predictable instructional implications**.
3. Should be **administered shortly before the unit or lesson** is taught so that the pre-assessment provides the most up-to-date information about students' strengths and needs.
4. You can create or design pre-assessment questions or you can use pre-existing item banks or curriculum materials. Whatever items you choose, just make sure students briefly explain their thinking and (as appropriate) draw a visual model as student thinking must be made visible in order to use it to differentiate instruction. You can always add on the expectation that students explain their thinking to any question that you find.

## Design Tools and Examples

The tools below use three steps to outline a template for designing pre-assessments:

1. Clearly articulate **the goals of the instructional unit**—what all students should know, understand, and be able to do connected to the big ideas and enduring understandings of the content area.
2. **Design a few key questions** aligned with the goals of the instructional unit that gathers evidence about important student pre-requisite knowledge, skills, and understandings.
3. **Predict instructional implications** for each readiness pre-assessment question (e.g.: what type of pre-requisite knowledge, skills, and understandings would we expect for Grade X based on previous content standards related to this concept?).

[Readiness Pre-Assessment Tool](#) - this is a template teachers can use to design pre-assessments when planning a unit of instruction. Teachers can make a copy of the document and use it for planning to identify student strengths and needs related to pre-requisite knowledge and skills, to make better instructional decisions for students to enable access to grade-level instruction in the current and/or next unit of instruction and determine flexible grouping.

Modified from Evans, C. M. & Thompson, J. (2020). *Classroom Assessment Learning Modules* and Wiliam, D. (2018). *Embedded formative assessment, 2nd ed.* Bloomington, IN: Solution Tree Press.

- [Mathematics Pre-Assessment Exemplars\\*](#)
  - [Grade 5 Math Readiness Pre-Assessment Example\\*](#)
- [Middle School Science Readiness Pre-Assessment Example\\*](#)
- [Grade 1 ELA Readiness Pre-Assessment Example\\*](#)
- [Grade 7 Visual Arts Readiness Pre-Assessment Example\\*](#)

\**Please note:* These examples were based on Common Core Standards. Formative assessment examples based on the Minnesota K-12 Academic Standards, are posted on Testing 1, 2, 3's [Classroom Assessment page](#), under the 'Formative Assessment' tab, 'formative assessment unit-planning' and 'lesson-planning' sections.

### ***Resources***

Hockett, J. A., & Doubet, K. J. (2013). Turning on the lights: What pre-assessments can do. *Educational Leadership*, 71(4), 50–54. <https://doi.org/10.17226/9853>.

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