

## Making Sense of Educational Assessment

### What Is Educational Assessment?

Educational assessment is a systematic process of documenting and using evidence to improve educational programs and student learning. The evidence or data used for educational assessment can be related to knowledge, skills, practices, beliefs, and attitudes.<sup>1</sup>

### Assessment Purposes

Educational assessments play a key role in research, evaluation, and instruction, but assessments can differ in important ways depending on their purposes.<sup>2</sup>

#### ASSESSMENT FOR RESEARCH

Researchers use assessments to **study outcomes** for a particular population or to **examine relationships** (for example, between student characteristics and assessment outcomes). The purpose of assessment for research is to **test theories and produce generalizable findings** that may inform policy or practice.



#### ASSESSMENT FOR EVALUATION

Evaluators **generate questions** to be explored and use assessment results to **determine the effectiveness of an initiative or program**. The purpose of assessment for evaluation is to generate findings and **to take action to improve programs**.



#### ASSESSMENT FOR INSTRUCTION

Educators use assessments for a variety of purposes. They can use assessment results **for learning** to diagnose what students know and to inform instruction. The assessment results can also be **of learning**, where they are used to summarize the growth and achievement of groups of students.



### Types of Assessment for Instruction

There are different types of assessment *for learning* and *of learning*.<sup>3</sup>

#### ASSESSMENT FOR LEARNING

##### DIAGNOSTIC

Diagnostic assessments are used to identify what a student does or does not yet know, diagnose gaps in learning, and identify strengths.

##### FORMATIVE

Formative assessments are used to measure how and what a student is learning and provides feedback to students and teachers. These assessments are used in the classroom context and often administered frequently to inform instructional decisions.

#### ASSESSMENT OF LEARNING





##### INTERIM

Assessments are administered throughout the year to track the growth and achievement of groups of students on specific standards. The assessments are common across groups of students and teachers to compare results.

##### SUMMATIVE

Summative assessments can be used to certify achievement and may be administered at the end of the unit, semester, or year focusing on a collection of standards. Results are used to make high-stakes decisions such as guidance on the effectiveness of programs or practices or determining resource allocation.

## How Results of Assessment for Instruction May Be Used

 WHO WILL USE THE RESULTS?	 HOW WILL THE RESULTS BE USED?	 WHAT TYPE OF EVIDENCE OR INFORMATION IS NEEDED?	 WHAT TYPES OF QUESTIONS CAN BE ANSWERED?
<b>STUDENTS</b>	<ul style="list-style-type: none"> <li>Track needs, effort, and successes</li> <li>Inform choice of learning activities and projects</li> <li>Influence educational learning plans</li> </ul>	<ul style="list-style-type: none"> <li>Artifacts and results of ongoing, formative checks for understanding</li> <li>Interest inventories or surveys</li> <li>Mastery of learning targets</li> </ul>	<ul style="list-style-type: none"> <li>What do I need to do to be successful?</li> <li>Are my efforts paying off?</li> <li>Am I meeting learning targets and standards?</li> </ul>
<b>TEACHERS</b>	<ul style="list-style-type: none"> <li>Identify individual needs</li> <li>Identify needs of groups of students or whole class</li> <li>Certify level of mastery</li> </ul>	<ul style="list-style-type: none"> <li>Artifacts and results of ongoing, formative checks for understanding</li> <li>Diagnostic checks for understanding</li> <li>Ongoing formative or diagnostic checks for understanding summarized for the group</li> <li>Results of summative measures</li> </ul>	<ul style="list-style-type: none"> <li>What learning supports does this individual student need?</li> <li>Where are there learning gaps and misconceptions?</li> <li>What instructional activities are needed for this group of students?</li> </ul>
<b>SCHOOL OR DISTRICT ADMINISTRATOR</b>	<ul style="list-style-type: none"> <li>Evaluate instructional programs</li> <li>Evaluate teachers</li> <li>Determine the allocation of resources</li> </ul>	<ul style="list-style-type: none"> <li>Summative assessment results for groups of students (instruments and processes in common)</li> </ul>	<ul style="list-style-type: none"> <li>Does instructional programming have the predicted results?</li> <li>What areas does a teacher need to be better supported?</li> <li>Where will investments be made in support of instruction?</li> </ul>
<b>STATE DEPARTMENT OF EDUCATION</b>	<ul style="list-style-type: none"> <li>Evaluate programs and initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Summative assessment results for groups of students assessed on state standards</li> </ul>	<ul style="list-style-type: none"> <li>How well are students demonstrating mastery in mathematics standards?<sup>24,5</sup></li> </ul>



## References

1. Allen, M. J. (2004). *Assessing academic programs in higher education*. San Francisco: Jossey-Bass.
2. Patton, M. Q. (2017). *Evaluation flash cards: Embedding evaluative thinking in organizational culture*. St. Paul, MN: Otto Bremer Foundation. [https://ottobremer.org/news\\_stories/evaluation-flash-cards/](https://ottobremer.org/news_stories/evaluation-flash-cards/)
3. Carnegie Mellon University (2023). "What is the difference between formative and summative assessment?" Eberly Center for Teaching Excellence & Educational Innovation. <https://www.cmu.edu/teaching/assessment/basics/formative-summative.html>
4. National Academy of Education. (2021). *Educational assessments in the COVID-19 era and beyond*. Washington, DC: Author. <https://files.eric.ed.gov/fulltext/ED618967.pdf>
5. Stiggins, R. J. (1997). *Student-centered classroom assessment (2nd ed.)*. Upper Saddle River, NJ: Prentice Hall.

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