Eliciting and Interpreting Evidence

A key part of planning and enacting a lesson is the integration of evidence gathering strategies into teaching and learning. As teachers create lesson plans, it is important that they consider how teaching and learning activities they plan can also provide opportunities to obtain evidence of student learning during the course of the lesson. Such opportunities may arise during teacher-student interactions, during peer interactions, and from examining student work products. The learning experiences in which students are engaged can provide evidence of their learning. Evidence of students' learning status during the lesson can be elicited using the following strategies.

Tasks

High quality instructional tasks, well aligned with Learning Goals and designed to stimulate students' thinking, can reveal substantive insights into how student thinking is developing. It is not enough to check if students can recall basic knowledge and procedures but rather tasks should help teachers determine if students can apply their knowledge, reason, develop arguments and counter arguments, and so on.

Observations

Although student work products can provide solid evidence of student learning, observations of student interactions during instruction also can reveal misconceptions, confusions, or fragmentary understanding. Observations also show how students negotiate meaning, manage their behavior and emotions, take responsibility, use different strategies or change strategies with new evidence, or collaborate with others. These attributes of learning are best assessed through teacher observation as students are working on complex and engaging tasks.

Questioning

Teacher questions can be designed to provide evidence of student thinking relative to lesson learning goals. Questions should elicit evidence of student learning to find the gaps between what students know and what they need to know. Questions should probe the "how" and "why" of student understanding, rather than just focusing on "what" students know. Questions can encourage students to explain their reasoning and how they arrived at solutions, decisions, and opinions.

Discussion

Rich discussions between a teacher and students, or between and among students, can serve to externalize students' thinking, such as the ways in which they have processed a given task, the strategies they have employed to solve complex problems, or their use of logic and evidence to support or refute a claim.

When interpreting this evidence, teachers need to think beyond "got it" or "didn't get it." This gives them a more nuanced understanding of students' learning, including how students' thinking and skills evolve during the lesson. It also helps them make forward-looking interpretations to inform decisions about next steps in learning.