**Dylan Wiliam on Effective On-the-Spot Assessments**

 In this thoughtful *Educational Leadership* article, Dylan Wiliam (University of London) describes the *initiate-respond-evaluate* cycle: the teacher asks a question, calls on a student with a raised hand, says whether the answer is right or wrong, and moves on. The teacher’s intent is to check for understanding, but there are several problems:

- Student participation is voluntary, which leads to the “Matthew Effect” (the rich get richer, the poor get poorer).

- Calling on one or two students doesn’t give the teacher an adequate sampling of the whole class’s understanding.

- Low-level, off-the-cuff questions can mislead the teacher into thinking students understand when they don’t.

“Trying to manage the learning that is happening in 30 different minds at the same time will always be extraordinarily challenging,” says Wiliam, but he believes there are ways to do better:

 • *Cold-calling* – The teacher tells students to raise their hands only to ask questions, not to answer them, and calls on students at random (using an electronic randomizer or popsicle sticks). This simple shift can have a major impact on teaching and learning, says Wiliam – but it often meets resistance from students: eager beavers aren’t able to show off their knowledge, and non-participators have to pay attention. Nevertheless, a no-hands-up policy equalizes class participation, increases engagement, and gives the teacher a more accurate idea of the class’s understanding.

 • *Posing the question first* – Wiliam recommends asking a question first, pausing to get everyone thinking, and then calling on a student.

 • *Using statements rather than questions* – For example, rather than asking, “Which country was most to blame for the outbreak of World War I?” the teacher says, “Russia was most to blame for the outbreak of World War I” and invites students to agree or disagree, with evidence.

 • *Planning better questions* – Teachers should put more time into formulating questions, says Wiliam, “because we cannot peer into students’ brains to see what is going on” and “you can’t give good feedback until you find out what’s going wrong in the first place.” For example, asking students to simplify the fraction 16/64 can produce a correct answer (1/4) for the wrong reasons (the student “cancelled” the sixes).

 • *Pushing the envelope* – “If the students are answering every one of the teacher’s questions correctly,” says Wiliam, “the teacher is surely wasting the students’ time. If the questions are not causing students to struggle and think, they are probably not worth asking.” He is fond of saying to his students, “Mistakes are evidence that the questions I asked are tough enough to make you smarter.” Research indicates that long-term learning improves when students make mistakes and correct their answers.

 • *Asking multi-level questions* – This allows students at different achievement levels to participate. For example, the teacher might write two math problems on the board and ask, “Which of these two questions is harder and why?”

• *Using all-class response systems at least every 20-30 minutes* – Wiliam favors low-tech methods – dry-erase boards, ABCD cards, and students holding up fingers – and recommends multiple-choice questions to simplify analysis. “The powerful thing about all these approaches is that the teacher can quickly scan the students’ responses and make an immediate decision about what to do next,” he says.

 • *Using exit tickets* – This can help the teacher decide where to begin the next lesson. If students write their names on the back of their answers, it can also allow the teacher to group students by misconceptions or creating mixed-answer groups for peer instruction.

“The Right Questions, the Right Way” by Dylan Wiliam in *Educational Leadership*, March 2014 (Vol. 71, #6, p. 16-19), <http://bit.ly/1pSAwBF>; Wiliam can be reached at dylanwiliam@mac.com.