Quality teaching is a tapestry of skills

eacher effectiveness is getting a lot of attention in the mass media and education press lately. Some writers explore the conditions that support effective teaching. Others concentrate on teacher preparation and admission into teaching preparation programs. At the same time, private foundations and federal grants are making substantial funds available to determine how to measure effective teaching.

Measuring effective teaching is only one part of the comprehensive framework of improving student learning. District and school leaders, including teacher leaders and coaches, have essential day-to-day work to ensure quality teaching for all students. NSDC's standard on quality teaching states that all professional development that improves student achievement integrates three critical elements: teacher content knowledge, instruction, and assessment.

The Quality Teaching standard does not intend to reduce teaching to three elements. Rather, it focuses professional learning with a laser-like precision on the core elements of teaching, emphasizing that professional development is essential to integrating these three components to produce the results desired.

Aiming for integration

Three examples illustrate the importance of integrating these elements well.

One is the challenge of introducing new instructional methodologies, such as the high-yield strategies of Robert Marzano. Even when the research base to support the methods is strong, the way teachers learn about them may not be. Too often when teachers learn how to implement new pedagogies, they have insufficient support in three areas: examining their curriculum to identify which standards or outcomes are best taught using them,

NSDC STANDARD



Quality Teaching: Staff development that improves the learning of all students deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately.

adapting them to meet the needs of different types of learners, and remodeling their lessons and daily curriculum to take full advantage of the benefits of the pedagogies. Instead, the pedagogies are used occasionally and sometimes without careful analysis of when and where they are appropriate.

The second example concerns curriculum revision, such as how a district implements a reform mathematics program. I know about one district where teachers had only a one-day introductory workshop on the new materials; this is not uncommon. Yet many curricular and instructional revisions are dependent on deep teacher content knowledge. Without this, teachers may inadvertently find themselves resorting to familiar methods, thus compromising the integrity and potential benefits of the new curriculum.



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I draw my third example from a national meeting of mathematics educators where I had been invited as a facilitator. One general session included a presentation of a teaching episode via video case. Participants were asked to determine if this episode represented good teaching. Knowing full well I was not a content expert, I hung back for awhile. Finally when no one spoke, I did. I cited ways the teacher engaged students in the class. I mentioned how she talked about the concept in concrete and representational ways before she described it abstractly. I identified the diagram she had on the board for students who needed non-linguistic representations of complex ideas. Others followed and offered their thoughts.

Shortly into the participants' comments, a distinguished gentleman (I learned later that it was Hyman Bass, world-renowned mathematics educator and researcher) rose from the dais, approached the microphone, and stated, "Yes, you are correct. Because she taught so well, it is now unlikely that these students will unlearn the incorrect concept she taught them in this lesson. Just because she can teach well does not mean she can teach the content accurately."

These examples demonstrate how critical the teacher's understanding is to the students' experiences. They also show that content, instruction, and assessment must be deeply integrated to achieve quality teaching. They are a part of a larger tapestry that weaves together what a teacher knows about the discipline, the students, how to teach, how to teach each discipline, how to assess students' learning, and how to use assessment data to make informed instructional decisions focused on the needs of individual students.

My experience in being too quick to look at the practice of teaching through a purely pedagogical lens has helped me look more carefully at teaching as a nexus of the content, teaching, learning, and assessment. So often the most complex concepts we hope students will learn are reduced to a series of facts and tested at the remembering and understanding levels as described in the new Bloom's Taxonomy.

Teacher leaders and coaches have a responsibility to integrate into professional learning the multiple dimensions and complexity of quality teaching.

When facilitators or teacher teams plan professional learning, they want to ensure that the learning for adults produces outcomes at the higher levels of Bloom's Taxonomy. Leaders must consider how professional learning will engage teachers in applying, analyzing, evaluating, and creating to refine their teaching practice and increase student results.

Moving professional learning to higher levels

Professional learning that moves from knowing about to applying and reflecting on results integrates the following factors: authentic practice, opportunities to explore evidence of impact, reflection on practice, and moving learning into practice.

If teachers are learning to implement non-linguistic representation as an instructional methodology, for example, their learning is incomplete until they:

- Have examined their curriculum to identify which concepts within the curriculum are best taught using non-linguistic representation;
- Adapt the use of non-linguistic representation for students of varying level of ability and those who are English language learners or have special needs;
- Design a lesson using non-linguistic representation;
- Develop an assessment of student learning appropriate to the level of learning;
- Reflect on how the use of non-linguistic representation influences student engagement and learning; and
- Evaluate the effectiveness of non-linguistic representation on their student learning goals.

Finally, there are two conditions that make it far more likely that teachers will use a given instructional methodology appropriately and frequently to advance student learning. They are that coaches follow up with classroom support, and that collaborative learning teams extend teachers' learning and reflection on their application of the methodology.

Such comprehensiveness in professional learning increases the rigor of professional learning while raising expectations for use of the new instructional methodology, all while providing teachers sufficient support.

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