## DidThe Learn It

Jay McTighe brings international expertise to student assessment

ay McTighe is one of a small group of educational thinkers whose focus on student assessment is bringing about fundamental change. Few teachers believe that standardized tests are the answer to demands for accountability. McTighe demonstrates how a school can make assessment a meaningful and central part of its entire learning culture.

McTighe has co-authored Assessing Outcomes and Assessing Learning in the Classroom. He has also served as director of the Maryland Assessment Corporation, a collaboration of school districts to develop and share formative performance assessments.

We spoke with McTighe while he was home in Columbia, Maryland. Gracious and eloquent, McTighe demonstrates what teachers and principals value most about the art of teaching: thoughtfulness, charisma and scholarship.

OPC: Ontario now requires that teachers use new assessment policies in schools and classrooms. We'd like to ask you to share some of the insights which your international work on assessment methods has given you.

McTighe: The widespread influence of outcomes-based, or standards-based education has been a real catalyst for this growth of

interest and awareness of assessment. As your readers would know, there are requirements in provinces and states that local boards actually provide assessment information that would go beyond anything that may be gathered from large scale standardized provincial, state or even national type of assessment. One part of this relates to the accountability movement that is tied to outcomes and standards. There is an increasing demand by the public, business communities and politicians to hold schools accountable for student achievement and to justify their expenditures.

Another important concept in assessment

lies in our understanding of learning and the learning process, and the recognition that learning involves much more than just taking in information and giving it back. It involves students constructing meaning, making sense of things, seeing things from different perspectives and truly developing an understanding of what they are learning. With that recognition about the learning process and the instructional implications also comes the recognition that assessments rooted in selected response or recall are really inadequate. Fully assessing students' ability to understand and use or apply knowledge requires more than just giving back bits and pieces as in a multiple choice or short answer assessment format.

OPC: Would you go into more detail as to why you think it is so important that teachers collect a number of quality assessment evidences of student performance that are varied in nature, beyond some of the more traditional forms?

McTighe: We use assessment to make inferences about what students have learned, what they know and can do. To make valid inferences we need to base them on various sources of data or evidence and not a single source of data. An analogy I like to use in this regard is a photographic one-you can think of any assessment, a quiz, a test, an observation, as similar to a photograph, and like a photograph it is informative, revealing, it gives us a picture-but the very definition of assessment suggests that if we really want to make valid inferences we need to be looking at more than a single picture.

Therefore, sound assessment really requires a photo album approach where we look at various sources of evidence from different types of assessments put together in a photo album. We get a more complete, accurate and revealing portrait of an individual than from any single photograph within. Many people think about validity as tied to a particular test or particular assessment but the larger concept of validity refers to the extent to which we can make valid conclusions from the information or data obtained from assessments. The fundamental principle is that to make more valid inferences and more justifiable conclusions about student learning, we need more rather than less data. In the classroom this is straightforward-it implies that teachers collect assessment evidence in both formal ways, such as through tests, as well as informal assessments, observations, discussions with students, and looking at student work over time. Taken together, this is going to give us

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a richer, more accurate picture of an individual than just a test at the end.

The second reason for using a variety of assessment methods and formats has to do with the nature of knowledge that we teach. We can think about different categories of knowledge-declarative knowledge is one category which refers basically to facts, concepts and principles-what we want students to know. A second category we could refer to as procedural knowledge, referring of course to skills and processesthings we want students to be able to do. The third category is attitudinal, or relating to habits of mind. For example, teachers help students to appreciate reading as a leisure time pursuit, or cultivate habits of mind, such as persistence, as an important lifelong habit of learning.

These three categories are not just academic in nature-they have implications for teaching. We know that people learn facts differently from the way that we acquire habits of mind. We learn skills and processes differently than we develop a deeper understanding of an abstract concept. So there are implications of these categories for teaching but similarly there are implications for assessment.

An assessment that goes beyond just selection or recall would be needed if we really wanted to assess for understanding, and these are again under declarative knowledge. For procedural knowledge, I believe that performance type assessments are the norm and have been for many, many years. In the procedural areas such as art, music, reading, writing, physical education and health, in those subject areas where we teach kids to do things, teach them skills and processes, the natural way of assessing procedural knowledge is via performance. After all, you teach kids to do something, how do you assess them? You watch them do it-you watch and observe their performance or you look at the product of their work, written, visual or three-dimensional, for instance.

For straight facts and basic skills we can use objective paper and pencil testing. For procedural knowledge or for understanding in a deeper way, we need more performance type assessments.

If we look at the third category of habits of mind or attitudes, these types of goals demand yet another type of assessment which I would describe as collected evidence over time. It would be inappropriate to have a test on persistence on a Tuesday, but we could gather evidence of students' persistence over time. These may be through observations, anecdotal records and samples of student work.

OPC: How would all of these forms of evaluation fit with our goal of teaching thinking skills?

McTighe: The goal of cultivating thinking and reasoning skills is challenging from an assessment point of view-how do we really assess higher order thinking? You can't think in higher order ways without something to think about. Therefore, there needs to be content combined with thinking for any meaningful cognition to occur. This suggests therefore that from an assessment point of view, we would always want to assess higher order thinking within the context of some content, and I say that because there have been some efforts over the years to assess discrete thinking skills or processes through decontextualized items, and I personally don't believe that is appropriate or effective. We need to nest our thinking in something that is contextual and content-based.

Assessments of higher order thinking would occur within assessment tasks, particularly performance assessments, that are framed around issues or problems. By framing our content around issues or problems we confront students with opportunities to use higher order thinking because in discussing issues, we will compare different points of view and develop criteria upon which we can make a decision. In problem solving we give students ill-structured situations that demand various reasoning or problem-solving strategies or heuristics. In interpretive work, we give students data or text and ask them to make sense of it, where they have to analyze, evaluate, synthesize, and so this to me is the way of assessing higher order thinking. You must embed various types of thinking skills and processes within content, framed around issues or problems.

OPC: Teachers can no longer hold out marks as a motivation for students to complete assignments on time, attend class regularly and so on. Why, in your opinion, is it important to separate those learning skills from actual achievement in a subject area? McTighe: For me it is a rather straightforward argument, and that is going back to the purpose of grading and reporting. The purpose of grading and reporting is to communicate to students, parents and others, including perhaps colleges and employers, student achievement and student performance. What are we basing our reporting on? We are teaching toward learning outcomes or content standards, so we want to report student performance or achievement of the learning goals or outcomes, but there are other important aspects of school work, including learning skills, or work habits. Typically, teachers have merged the learning skills or work habits with academic achievement and performance, in large part in my view, because they have been required to come up with a single grade for a subject or a marking period. I wholeheartedly

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endorse Ontario's policy to separate performance or academic areas from learning skills or work habits. If our goal is to clearly communicate to parents, teachers, students and others what students are learning then we need a separate category for their performance or achievement based on the learning outcomes or content standards.

However, I also agree with the teachers who would say, "Yes, but I have students who may do well on tests, assignments and performance tasks, but their work is late or they are behaviourally disruptive." I think this behaviour should be clearly noted but not mixed in with academic reports. Separating out work habits or learning skills enables teachers to do a more accurate job

of communicating what students do as well as how well they are learning. Without the separation we get a very common phenomenon which virtually every teacher has experienced, and that is if we combine marks into a single score or grade we have students who may get, for instance, a B because they work very hard and come on time, and while their work may not be up to standard, their learning skills or work habits would bring them up.

In my ideal world, I would add a third category to report cards. Number one would be performance judged against standards or outcomes. Number two would be learning skills area, where as an employer I want to know if kids are on time, have a positive attitude, are trying hard and so on. My third category, at least for some levels or courses, would be progress. If we had a progress category this would enable us to honour what many teachers now honour by raising or lowering a single grade: students who are working hard and making significant progress toward standards even if they may not be there yet. This includes students who may be in special education or who are second language learners. Having such a category on a report card would enable that. It would be something I would offer in the spirit of a more analytic rather than holistic grading and reporting.

OPC: How do you think we can assure parents that the new assessment approaches are giving us more accurate information about their children's work?

McTighe: I think the most effective way of communicating student performance to parents is to ground our communication in their work. The best way of helping parents know what their children are doing, how well they are doing against the standard, what they need to work on and what progress they are making along the way is to collect student work and reference it to established performance standards. Certainly, we want and need to give parents as much information as possible which would include any type of external standardized tests, but my experience is that parents typically don't know what is tested on a standardized test, nor do they really understand the stanine

scores or the percentile rankings that are derived from those tests. From a classroom and school point of view, what we need to give parents is much more robust information grounded in student work.

I had the recent experience of going with my wife to my daughter's high school-she's a 10th grader, in a school that has been very actively collecting student work in portfolios. We went from teacher to teacher, and literally the conference was grounded in our review with the teacher who collected my daughter's work in a file folder. It was very helpful; we had very good discussions. My wife and I were very clear about what Maria was doing and understood areas where she needed improvement. It was much more meaningful than just looking at a series of abstract marks on a report card or percentages or stanine scores on some standardized tests. In my experience, when parents are provided with this kind of evidence in addition to the more standardized measures, they appreciate it, they better understand it and they are more supportive of working with the school to help improve performance.

OPC: Jay, do you want to talk a little bit more about that? Where do you see input from parents fitting into the assessment process?

McTighe: Let's go back to the photo album analogy. Parents see their children daily, and can provide evidence about what they see at home in terms of work habits, effort, and punctuality, both with work and attendance. Certainly there is potential bias when you are getting evidence from parents, but if you think of it as one of many in the photo album it can be informative and revealing. Some schools send home surveys, or requests for information from parents regarding things like their view of their child's best learning style and learning mode, interests, rough spots and frustration that the student displays at home. While we would likely not include this information on a report card, we could find it useful in helping us better understand and instruct our students.

OPC: In your new book, co-authored with Grant Wiggins, you talk about true understanding, which is different from knowing. How can teachers know that students truly understand and can apply knowledge in a meaningful way?

McTighe: I will go back historically a bit to Benjamin Bloom, Jerome Bruner and more recently Howard Gardner, as well as my work with Grant Wiggins. These educational leaders and great thinkers of the past have

Based on the assessments they see, what would outsiders infer is most important to us?

made an important point about understanding. That is, if you really understand, you can apply your knowledge and skills appropriately to a new situation or a novel context. If you think about the terms "know" and "understand"-knowing is essentially a binary idea-you know something or you don't, you have the fact or you don't.

Understanding, however, is more a matter of degree. You may have a basic understanding at one point, but over time, with more experience, you get to a deeper level. This suggests, therefore, that from an assessment point of view we would be looking to assess understanding, not in terms of a recall or recognition test, but to set up novel conditions, new contexts, and ask students to

apply knowledge and skills appropriately. This is the conceptual foundation for performance assessment.

In Understanding by Design, Grant and I have gone a bit further with this to suggest that some particular types of indicators of understanding that one would look for in assessments, are different facets of understanding. For example, you really understand if you can explain why or how. This is certainly not a new idea-essays or exams focus on explanation. This is the reason selected response methods of assessment are very good for some things like knowing facts and basic skills concepts, but inadequate to assess true understanding.

Another way of thinking about understanding is to see understanding as being able to take different perspectives. This idea refers not only to issues we might explore in the social sciences where you can examine a controversial issue from different sides, and, even though you may have a particular point of view, you can understand and even argue the other side. In mathematics, representing a problem in different ways is an illustration of changing perspective as evidence of a deeper understanding and insight. In literature, being able to interpret stories and analyze characters from different points of view is a hallmark of a thoughtful, mature reader. From an assessment point of view, if we really want to see student understanding, we might ask them to adopt different perspectives, articulate different points of view, analyze from multiple doorways.

OPC: Let's turn for a moment to the school principal's role in implementing new assessment models in a school. Have you any suggestions as to how principals can make these models of assessment a schoolwide activity?

McTighe: At the school level, one should focus not only on the external assessments that are used for accountability purposes, but should also balance the high stakes accountability assessments with the recognition that, fundamentally, good assessment is at the heart of good teaching. Even if what the province or state may wish to assess and publish in the paper were to disappear, we

would still want good assessment as part of teaching. Any good teacher needs and wants to assess because assessment helps us answer the question "Did they learn it? Sure, I taught it but what did they understand about it?" Assessment helps us answer those questions. Principals who focus on assessment, not just on the external standardized test scores, who honour and celebrate the important role of assessment in good teaching and learning, possess the sort of conceptual mind set that I advocate.

Principals can promote more discussion about assessment and more active use of a variety of methods throughout the school in focused faculty meetings or by planning in-service days. One exercise I have done in workshops and principals have done with faculties is to ask people in the school to think about a time when they were assessed and the assessment experience significantly contributed to their learning. Individuals would write it down and then get together with three to five other people, and share qualities of the assessment experience that really improved their learning. They then generalize aspects of assessments that really improved their learning. Quite notably, many of the stories come from outside of K to 12 education-they relate to hobbies, interests, other careers and sports.

Another activity you can do at a faculty meeting is to ask teachers to bring copies of their assessments they are currently using and keep it open-ended, so some people will bring tests, some will bring performance tasks, and others may bring observation forms or portfolios. Lay those items on the table and mix them up if you want and then some questions will come up. To what extent are these assessment methods assessing all the learning outcomes that we say are important? Are there some things falling through the cracks because they are not being assessed? If someone were to come to our school from the outside, what would they infer about what is most important to our work based on the assessments they see? This is a provocative way of engaging faculty in looking at their assessments and thinking about the larger picture.

A couple of other ways principals can

support a broadening view and practice of assessment are to ask students: what is expected in this unit or course, how do you know how you are doing, when are you done, how good is good enough, what criteria will be used to judge your work? Visiting classrooms and talking to students is often quite revealing. Talk with teachers about ways in which they are making their assessment target clear to students—do they have published criteria for their performance type assessments? Make it evident through what we look for and what we talk about with teachers that assessment is important and that a range of assessments are valued.

A rather obvious role a principal can play is providing resources on assessment and this can take a couple of forms. Purchase assessment resources for teachers that would be available in a resource centre. Sponsor teachers to attend local or regional workshops on assessment. Orchestrate a visit to another school where teachers are using a variety of assessments that your school may wish to emulate.

What I have come to believe and appreciate about focusing on assessment is that I really think it is a doorway into the most important questions in our profession. Just to have a chance to get together and work with others around assessment, the discussions that come up, are rich and important. What do the outcomes really mean? What would it look like if kids could do them? How will we know that students truly understand what we are teaching? What is quality work and do we agree? How good is good enough, and do we agree from teacher to teacher on that question, and how are we going to teach in ways that will help students get better at the assessment we have developed? All of these are the questions that are pursued and explored when assessment becomes a school-life focus because it's much more than just about getting a grade or a measure.

OPC: That's a wonderful closing to our discussion. It gets right to the heart of assessment practices in schools. Thank you very much. ●

This interview was conducted by Ethne Cullen, OPC Professional Affairs.