



National Center for Technology Innovation

Advancing Technology Innovations for All Students

NCTI 2010 Technology Innovators Conference

Inclusive Assessment Practices

- **Jennifer Higgins**, Research Manager, [Nimble Innovation](#), a division of [Measured Progress](#) (Moderator)
- **Jim Pellegrino**, Co-Director, [Learning Sciences Research Institute](#); Professor, University of Illinois, Chicago
- **Martha Thurlow**, Director, [National Center on Educational Outcomes \(NCEO\)](#)

Monday, November 15, 2010

Summary: Assessments must be inclusive, timely, informative and used to help students during the learning process.

Discussion

Martha Thurlow

- An inclusive assessment accurately measures knowledge and skills; leads to appropriate interpretations about knowledge and skills; produces the same results regardless of who administers or scores the assessment; and produces similar results from one time to another.
- Inclusive assessments include everyone. There has been a misunderstanding on who “all kids” include, and not everyone is thinking *all* students with assessment development. It is important to consider all students, including English language learners, English language learners with disabilities, and English speaking learners with disabilities from the beginning of evaluation design.
- Issues surrounding inclusive assessments include: limited funding sources, as the RTTT Assessment Program is only for the regular assessment (had to find additional funds for the alternate assessment – the AA-AAS); belief that there are *gap kids* rather than *gaps in the assessment system*; different perspectives on universal design and “standardized assessment”; definition of *accommodation* and when an accommodation is just part of universal design; technology platforms and approaches are not yet accessible to all students
- We have common core state standards and common assessments, we should be able to have common accommodations policies. This would involve: defining what we really want to measure (and not measure) based on specifications of the standards; clarifying assumptions and beliefs so we are on the same page; agreeing on what does or does not change what we are attempting to measure. There is variability among states in terms of students with disabilities who use an accommodation, so it’s important to be involved with discussions in states.
- A comprehensive assessment system that provides greater access for students with disabilities considers formative assessments; interim assessments; through-course assessments; summative assessments that are cumulative; and alternate



assessments that provide alternate ways to demonstrate proficiency. We need to have conversations about how these play out for students with disabilities when the assessment is technology based.

- Cases have been made for and against adaptive assessments:
 - Arguments for state that they provide more diagnostic information for shaping instruction and more accurate estimates of what the student knows.
 - Arguments against state that they are not useful in determining how the student is performing on grade-level standards; they can be deceptive in judging student progress toward grade-level standards; they can be inaccurate (summative results intended to reflect achievement of grade-level standards); they can serve as a possible deterrent to student opportunity to learn grade-level standards; and they encourage continued instruction in basic skills as opposed to applied skills.

Jim Pellegrino

- Assessments in regular education have been of a narrow focus and haven't advanced much in educational practice. Assessment and the National Education Technology Plan (NETP) take a transformative look at education and technology. The NETP takes a look at what learning and technology is about. The big goal around assessment systems is to measure what matters. The idea is that assessment is about gathering information and learning how to improve something in the moment rather than looking at something at the end when everything is over. Technology can help us measure a range of competencies. In the process of doing this, we can think of how to create electronic learning records. We can aggregate and analyze information to improve education on a system level.
- Creating and implementing effective assessments depends on research and conceptual foundations. With the changes in technology, we have changed what we know on learning and assessment. We have a significant body of research and theory on how people learn, the nature of knowing student learning, and the major domains of K-16 learning.
- Technology doesn't solve our problems, but it can allow for a richness in the nature of information that is presented to students. We tend to move toward a procedure in which we simplify things so much that we don't measure what is important. It is perfectly reasonable to assess people with intellectual difficulties using a variety of means.
- In the current climate of digital resources, students read things on the web. We know very little about the kinds of skills that kids have or need to have on multiple source comprehension. Web-based summative and formative assessments help scaffold learning.



- Advantages of technology-based assessments: includes interactive environments and access to information; provides the ability to represent information that is not possible to observe in the classroom; represents temporal, causal, dynamic relationships in actions; allows for multiple representations; allows student manipulation; allows students to revisit their work; captures and records student responses; and allows for a range of tools and supports.
- It's imperative that we invest in building better assessments. We also need to learn how to help teachers use the information from assessments to improve student learning.

Jennifer Higgins

- Accessible tests are rooted in universal design for learning (UDL). UDL requires one to build in flexibility to meet a wide range of users. For example, present information to student, interact with content, develop a quantitative score, make inferences of what the student can do.
- Barriers exist in each step, such as inaccurate receipt of information, challenges to interacting with content, inaccurate production of recording. Ways to overcome barriers include adapted presentation, adapted interaction, and adapted response mode.
- Challenges to accessible test design include: lack of a standard set of accessibility options, lack of structure for specifying accessible information, and lack of method for interoperable content.
- The Accessible Portable Item Profile (APIP) standard is a comprehensive integrated solution for accessible test design, but not a test delivery system. APIP involves an XML tagging system that lets item writers capture writing content. The APIP provides structure to item development, specifies behaviors for test delivery, and requires specifications of student needs.
- APIP standards, coupled with universally designed interfaces, remove barriers to accessible test delivery. APIP standards improve test validity for all students and improves efficiency of item development and item transfers. Additional information about APIP standards can be found at: http://education.state.mn.us/MDE/Accountability_Programs/Assessment_and_Testing/APIP/index.html. The APIP Forum will be held December 7, 2010.

Discussion and Q&A

Question: I worry about a lot of what I see is promising with respect to what kids know, but the continuation of the consequential nature of testing will interfere with figuring out what we know. What do we do with the information?

- **Jim Pellegrino:** If you listen to the way in which people are thinking about how to characterize items and making them accessible, we're talking about how to code items and thinking about them deeply, that's a very large investment in the tasks



that we want students to perform. It's important in low stakes for teachers to act. It's when we move into high stakes testing that we move into constraints on things that are not economically feasible. We need to be able to resolve tensions. We need assessments that are cost effective. It's hard in high stakes world.

- **Martha Thurlow:** One of the opportunities is when coming out of race to the top – there is a de-emphasis on high stakes testing and an emphasis on what is going on in the classroom to make good decisions.
- **Jennifer Higgins:** I would add that a major advantage of NCLB is that all students are accounted for. On the flip side, there are unintended consequences of high stakes testing.

Comment (Wanda Gill, Office of Innovation and Improvement, ED): With real-time assessments, you get a snap shot of what happens in a day. Students might perform differently on a different day. Timing is an issue, how tests are issued is a different issue. Real-time testing can be a plus.

- **Martha Thurlow:** One of two consortia is on top of the agenda for a summative assessment that they plan to have all on computer with results available immediately. Part of the challenge – do teachers know how to look at results and do something with it immediately?
- **Jim Pellegrino:** There are issues to be solved with collecting the information. What is the grain size where we try to make differences? How do we track progress and what tools would go behind the system? As we move toward a more effective transformative system, there must be intelligent transformation behind it. What does this mean for students and teachers in terms of instructional planning? It is imbedded in some of the systems that we see now. Real time diagnosis is sophisticated. We don't have to ask the teacher to do it all when computers can do it faster.
- **Jennifer Higgins:** We don't want just a multiple choice test. We want technology to give immediate feedback, but we're not there yet.

Question: How do you negotiate cultural differences during the administration of tests?

- **Martha Thurlow:** This is addressed in at least one Race to the Top initiative in a formative assessment. It is not computer-based, but it is part of the plan.

Question: Can you speak to the issue of student needs?

- **Martha Thurlow:** We really know that there are challenges figuring out what student needs are. We've been working on developing training programs and figuring out characteristics of the student. Does the student have difficulties paying attention or possible accommodation needs? Some of the problems may be complicated because you're thinking about high stakes tests.



- **Jennifer Higgins:** Over the last three years, New England has required students to go in and set up profiles. There is a huge issue over the assignment of tools. Teachers have needed to know how to use applications, but teachers don't know how to use tools and they just assign tools not knowing the needs of students. We're doing new projects to develop tools and using validity work to see what students need. Students need to be involved in the decision-making process. When there is an environment that is universally designed, teachers can make good decisions

Comment: If classrooms used tools as part of the instruction and curriculum, there wouldn't be confusion in assessment.

Question (Ruth Ziolkowski, Don Johnston, Inc.): Is there any work being done to develop standards so that students are assessed with tools that they use every day?

- **Jennifer Higgins:** It would be ideal if students used same system for content and assessment. There is no system that I know of, but the consortium is there to see if it happens.

Question: Martha, you showed in the beginning who allows assessment and who doesn't. Will APIP help guide who makes those decisions?

- **Jennifer Higgins:** We tried to define the universe of everything allowed. Team members part of APIP got together. Which accessibility features are built into delivery systems? We asked folks to understand that they needed to be realistic. Asked to define what is needed in a testing program. Which are most important?
- **Jim Pellegrino:** When we talk about giving advice to the Department of Education we should consider accommodations policy. Giving kids the same test does not guarantee comparability. We need a deeper awareness and to think about circumstances in which all students are tested.

Comment: We need to think about instruction. If students are not allowed to interact with content, they are not going to be able to handle it when it comes to high stakes testing.

Existing Trends in Technology Innovation

Increased awareness among educators of how formative assessment can drive instruction.



National Center for Technology Innovation

Advancing Technology Innovations for All Students

Future Trends in Technology Innovation

- Greater use of formative assessments that will drive instruction.
- Greater alignment between tools used in instruction and tools used in assessment.

Two Key Points or Outstanding Challenges Identified by this Panel

1. There are a number of diverse needs that students have to demonstrate understanding of content information (e.g., language, learning style, disabilities). How do we develop and implement assessments that allow students to demonstrate what they've learned in a timely matter?
2. What will it take to align tools that accommodate during assessment with tools that are available during assessment?