



## April 2012: School Improvement Booster: Assessment

School leaders who model the everyday use of data in their leadership decisions encourage data to be used by everyone in making instructional and other decisions as a matter of course. School leaders matter.

There are two main types of assessment:

- **Formative Assessment** provides direct feedback to teachers and students during the learning and informs next steps.
- **Summative Assessment** provides information at the end of a learning period for the students and others who need access to their performance (Did the student learn the objectives we set out to teach when we started this unit, semester, year, course, etc.?) and for programs (Is this course, program, school, district effective?)

### Instructionally Sensitive Assessments

As Iowa public officials grapple with competing policy ideas related to accountability systems, they need your voice to ground them in the essential benefit assessment systems bring to schools. Although school leaders must avoid education jargon and getting too much “into the weeds” when talking with legislators, we hope the following will help you better understand and be able to articulate why a good assessment system matters to improve teaching and learning. If state action doesn’t deliver the assessment system you need locally, you will have to create the momentum for improvement in your own building or district.

Jim Popham, professor emeritus, UCLA, advocates for “instructionally sensitive” state tests, a mixing of the formative and summative purposes of assessment. Popham notes, “A test’s *instructional sensitivity* represents the degree to which students’ performances on that test accurately reflect the quality of the instruction that was provided specifically to promote students’ mastery of whatever is being assessed.” Confident that the assessment used has a high degree of instructional sensitivity, an educator knows what to do next to move the student toward the instructional target. He described the dimensions of instructionally sensitive assessments in the article “Instructional Insensitivity of Tests: Accountability’s Dire Drawback” in the October 2007 *Phi Delta Kappan*.

- The number of curricular aims (teachers cannot teach everything; there isn’t time in the school year, so the most important outcomes have to be identified and assessed)
- The clarity of assessment targets (the targets must be written in language everyone understands, so the concepts are understood and can be taught)
- The number of items assessed per curricular aim (test must contain sufficient items to measure each curricular aim so tests effectively report on each student’s achievement in terms of the aim), and
- The instructional sensitivity of items (response to the items is affected by the quality of the instruction and therefore instruction can be modified to increase student learning)

If Iowa is going to a model where teacher evaluation includes student learning performance, it is critical to have assessments in place that can be impacted by instruction.

Dr. Popham's entire article can be found here:

[http://www.pdkmembers.org/members\\_online/publications/Archive/pdf/k0710pop.pdf](http://www.pdkmembers.org/members_online/publications/Archive/pdf/k0710pop.pdf)

**Assessments Related to Educational Reform in Iowa**

Various ideas related to assessment are being considered in Iowa. Nothing is a sure thing, but we will keep you posted as this conversation continues.

Assessment	Currently Required	Governor	Senate	House
K-3 Reading	Diagnostic reading assessments at least twice annually in grades K-3; specifically states at the K level that DIBELS or assessment determined by state department must be completed by kindergarten students by Oct. 1 (Iowa Code 279.60)	Kindergarten readiness	Kindergarten readiness	Kindergarten readiness
<b>Iowa Assessments</b> grades 3-8 in reading, math and grade 8 in science	At least one district-wide assessment, including, but not limited to, reading, mathematics, and science as specified in 12.8(3). At least one district-wide assessment shall allow for, but not be limited to, the comparison of the school or school district's students with students from across the state and in the nation in reading, mathematics, and science. (Iowa Administrative Code 281 – 12.8 (1)(f), <b>Iowa Assessments</b> fulfill this requirement and are identified as the common assessment and are identified by name in the Iowa NCLB application workbook, revised February 15, 2011.	No Change	No Change	No Change
10 <sup>th</sup> Grade Iowa Assessments	Not currently required to be given.	Yes	No Change	Yes
11 <sup>th</sup> Grade Iowa Assessments in reading, math, and science	Required annually (Note explanation in <b>Iowa Assessments</b> Currently Required column explanation)	Replaced by ACT or other college readiness	No Change	Replaced by college or career readiness

High School End of Course Assessments	Not currently required	Yes	No Change	Yes
Career and College Readiness Assessments	Not currently required, but districts are required to report “the percentage of high school students achieving a score or status on a measure indicating probably postsecondary success.” 12.8(3)(a)(6)	Yes, a college readiness exam (i.e. ACT, SAT, etc.)	No Change	Career or college readiness exam
2 <sup>nd</sup> Assessment	Required in reading, math, and science 12.8(1)(f)(1)	No Change	No Change	No Change
Formative Assessment	Not currently required	No Change	No Change	No Change
Value Added Assessment for all students to allow credit for growth	Not currently required	Yes	No Change	Yes
PISA	Not currently required	Yes	No Change	No Change

### Future Iowa Statewide Assessments

Iowa has historically given the Iowa Assessments, first known as The Iowa Every Pupil Test of Basic Skills, since the mid-1930s. The Iowa Assessments are still in place and no decision has yet been made regarding how Iowa will assess student performance in the future. However, Iowa is working with 26 other states in an assessment project entitled the Smarter Balanced Assessment Consortium. In response to the question, “How is Smarter Balanced different from current assessments?” their website notes this, “Smarter Balanced is developing a flexible assessment system that promotes student success and provides meaningful feedback to teachers. Our vision is a balanced system of assessments—including formative, interim and summative—that improves teaching and learning.” These assessments will not be ready for implementation until 2014-15 and the decision as to whether Iowa will participate has not yet been made. The Executive Director of the Smarter Balanced Consortium met with the Iowa State Board of Education on March 29 to discuss the progress of the Consortium in developing an assessment system.

<http://www.smarterbalanced.org/>

### Kindergarten Readiness Assessments

The Iowa Department of Education website lists this idea as part of the education reform package: “Give all preschool students and enrolled 4-year-olds a kindergarten readiness assessment to determine early literacy and numeracy skills.” The policy driving this assessment serves both summative and formative purposes. The summative purpose is to determine the impact of preschool in moving 4-year-olds to readiness and a formative purpose is served in determining the baseline of readiness for the year.

### Growth and Compliance with Federal NCLB Requirements

The Iowa Department of Education (DE) has applied for a waiver from current NCLB requirements by proposing an alternative rigorous accountability plan. The DE has proposed a model to the federal government that determines school performance by considering both growth and proficiency. In the past Iowa has primarily considered proficiency, which answered this question: How did our students

perform on a single day, when taking the test? The answer to that single question for various grades, subgroups of students and students overall determined whether schools or districts would be identified as qualifying for the School in Need of Assistance or District in Need of Assistance designations. If the Iowa proposal is accepted, the state will look at both proficiency and the growth of all subgroups and students to determine a school's or district's status. Initially growth would be measured by comparing annual test score percentiles. The DE had planned on all 10<sup>th</sup> graders taking ITEDS and using the 10<sup>th</sup> grade scores as a baseline, using the ACT score, which aligns nicely to the ITEDs to calculate growth at 11<sup>th</sup> grade. The DE waiver request and the Governor and House Education Reform plans also include a value-added model. If Iowa is going to use growth data to confirm observations used to evaluate teacher performance, a value-added model would be necessary to implement that system. Currently 14 states use value added models. Below is a website explaining value added modeling and some informational links pertaining to it as well:

<http://www.tapsystem.org/policyresearch/policyresearch.taf?page=valueadded>

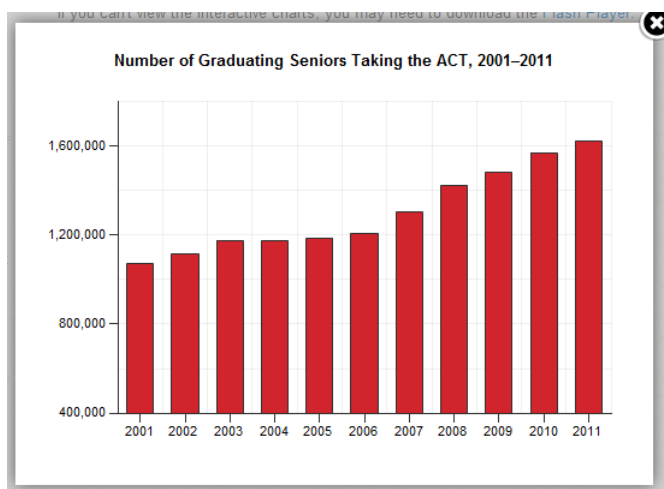
### End-of-Course Assessments

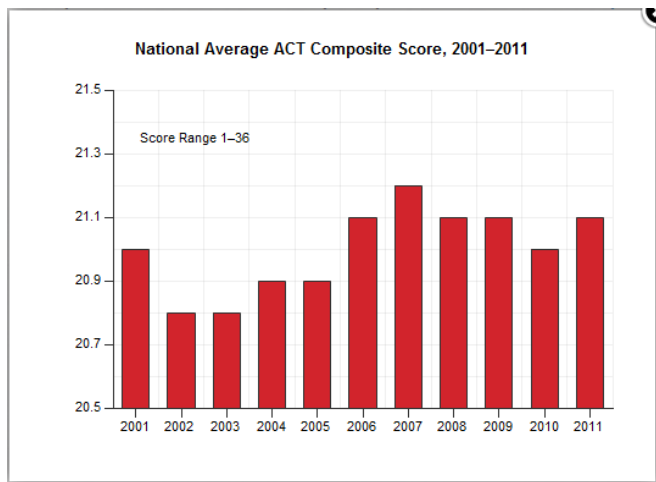
The Governor's plan also includes end-of-course testing requirements for graduation. Iowa Testing has had end-of-course assessments in high school courses since 2008. They cover Algebra 1 and II, Geometry, Biology, Chemistry, Physical Science, English Language Arts, US History, and US Government. But as with the other Iowa Tests, no determination has yet been made regarding what end-of-course tests will be required for accountability purposes should this provision Education Reform become law.

### College and Career Readiness Assessments

The Governor has proposed that, in lieu of the Iowa Assessments being given at 11<sup>th</sup> grade, all 11<sup>th</sup> graders would take a college readiness test. The legislation assumes an RFP process will choose from amongst interested bidders, which could be the ACT, SAT, or any test required for entrance into post-secondary education. The House Education Reform plan, HF 2380 requires districts to offer a choice to students between a college readiness and career readiness check.

One of the objections to the suggestion that all 11<sup>th</sup> graders take a college-readiness test is that schools will look less effective when all students take the ACT. In answer to the question, "If more students take the ACT, what happens to the average score?," the following charts from the [www.ACT.org](http://www.ACT.org) website provide some evidence on a national level to the contrary. It appears the predicted dip does not sustain.





Eight states used ACT as the 11<sup>th</sup> grade NCLB measure in 2011, testing 100% of the students. Let’s take a look at what happened to the scores in those states:

State	2001 Score (Composite)	2011 Score (Composite)	Change in Score
Colorado	21.5	20.7	-0.8
Illinois	21.6	20.9	-0.7
Kentucky	20.1	19.6	-0.5
Louisiana	19.6	20.2	0.6
Michigan	21.3	20.0	-1.3
Mississippi	18.5	18.7	0.2
Tennessee	20.0	19.5	-0.5
Wyoming	21.5	20.3	-0.8

Imagining similar trends in Iowa, here’s what might happen:

The Iowa 2011 average ACT score is 22.3, which ranks Iowa second among states testing more than 50% of students. Iowa ranks 13<sup>th</sup> among all states. The national average of students taking the ACT is 21.1. If Iowa uses the ACT as a test for federal accountability and has a typical experience of dropping 0.5 points to 21.8, Iowa students would rank first among states testing all students and would be tied for 23<sup>rd</sup> overall. And most importantly, all Iowa students would have a test under their belts that that is a gatekeeper for entry into post-secondary education.

Myfuture.com is a website that can help young people plan for college. It notes, “Developed by the Department of Defense and Joint Advertising Market Research & Studies (JAMRS), myfuture.com features career, college and military content, allowing users to explore all possibilities and gain insight into each option. For the first time, unbiased, detailed information on more than 900 civilian and military career fields and nearly 7,000 accredited colleges has been made accessible to young adults in one comprehensive site. In addition to college admissions details, average salaries and employment trends, myfuture.com provides advice on everything from taking the SAT to interviewing for a first job to preparing for boot camp. Step-by-step planning checklists are also provided as a guide for users, and favorite job and school information can be saved for return visits. Since myfuture.com is designed for young adults at many different life stages, we hope it will prove a helpful resource for many years. “ This site provides helpful information about many aspects of career planning. The section about college entrance exams is found here:

<http://www.myfuture.com/schools/articles/taking-college-entrance-exams>

### **Programme for International Student Assessment (PISA)**

“PISA is an international study which began in the year 2000. It aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students in participating countries/economies. Since the year 2000 over 70 countries and economies have participated in PISA.” These questions from the FAQ link provide some basic understanding.

#### **Who takes the PISA tests?**

Schools in each country are randomly selected by the international contractor for participation in PISA. At these schools, the test is given to students who are between age 15 years 3 months and age 16 years 2 months at the time of the test, rather than to students in a specific year of school. This average age of 15 was chosen because at this age young people in most OECD countries are nearing the end of compulsory education. The selection of schools and students is kept as inclusive as possible, so that the sample of students comes from a broad range of backgrounds and abilities.

#### **What does PISA test?**

Every PISA survey tests reading, mathematical and scientific literacy in terms of general competencies, that is, how well students can apply the knowledge and skills they have learned at school to real-life challenges. PISA does not test how well a student has mastered a school’s specific curriculum.

#### **How does PISA test this?**

To date, PISA has used pencil-and-paper tests. In 2009, some countries chose to participate in an assessment of reading using computers. The tests are made up of both multiple-choice questions and questions requiring students to construct their own responses. The material is organized around texts and sometimes includes pictures, graphs or tables setting out real-life situations. Each PISA survey includes about seven hours of test material. From this, each student takes a two-hour test, with the actual combination of test materials different for every student.

More about the PISA can be found at this link: <http://www.pisa.oecd.org/>

#### **And so on....**

There is much more than can be written about assessment and we will provide additional information in future editions of the School Improvement Booster. But we leave you with these recommendations:

- Embrace assessment as a critical component of school improvement.
- High stakes testing is likely to be here for the foreseeable future, so forge forth and be positive about the information you can get from these assessments. Also advocate for tests that are solidly aligned to the Iowa Core and instructionally sensitive.
- Rely on multiple measures of student learning to inform your work.
- Model the use of data in your own work, whether you are a teacher, principal, central office employee, or school board member.
- Use data to reach decisions and let your colleagues know how data has improved your practice and your students’ results.

### **Reading Corner**

As promised, ISFIS staff reading habits will be featured for several months. Larry Sigel, a partner in ISFIS, is rereading what he describes as a great book - *Terrible Terry Allen: Combat General of World War II – The Life of an American Soldier*. Larry loves history, mostly US. Once in a while he reads a Tom Clancy novel, but primarily sticks with non-fiction. His mom was an elementary teacher and fostered in him a love of reading, which has continued into his adult life. Thanks to all the moms and dads out there who

do for their children what Larry's mom did. And thanks to all the teachers, principals, librarians and others who play that role when parents cannot.

## Quotes

"...another important way to understand the different uses and impacts of assessment is to see the assessment system as a structure which both **provides information** and **influences what people do.**"

The Teaching and Learning Research Programme

"...(F)ormative and summative are not labels for different types or forms of assessment but rather describe how assessments are used."

The Teaching and Learning Research Programme

"We need to get the word out to the nation's teachers that formative assessment is capable of triggering big boosts in students' achievement—the educational equivalent of a cure for the common cold."

James Popham, Professor Emeritus, UCLA

"We have to think about accountability in a very different way. We have done a splendid job of holding nine-year-olds accountable. Let me suggest as a moral principle that we dare not hold kids any more accountable than we expect to hold ourselves."

Doug Reeves, Founder, Leadership and Learning Center

"Jeff Howard, president of the Efficacy Institute, uses an analogy that may resonate for people who have kids at home. He calls it the Nintendo Effect, which refers to the child who cannot focus or concentrate and is always moving about the classroom until you turn on the Nintendo machine, whereupon the child is transfixed, moving not a follicle of hair as he sits for hours in front of the machine. The question Dr. Howard asks is, 'How long would that child be staring at the screen if you mailed his Nintendo scores to him nine weeks hence?' Part of what keeps him engaged is not just what's happening on the screen. It is that he gets feedback that is timely, immediate, and relevant. If we're going to build a holistic accountability system, once-a-year feedback is not sufficient. We should be building a system that every month gives feedback to our children, our leaders, and our teachers so we can get busy building better instructional systems."

Doug Reeves, Founder, Leadership and Learning Center