

# School Improvement Booster: Assessment

## November/December 2012

The three legged stool: Curriculum, Instruction, and Assessment. Experts everywhere identify these three elements as the core of the work in schools. This School Improvement Booster is focused on assessment. We invite you and your leadership team to read this together and determine 1) where you are on the assessment journey and 2) what you need to do to improve your district-wide, comprehensive assessment plan. Without an effective system of curriculum and assessment, we are all a little like Alice.

"Would you tell me, please, which way I ought to go from here?"

"That depends a good deal on where you want to get to."

"I don't much care where –"

"Then it doesn't matter which way you go."

Lewis Carroll, *Alice in Wonderland*

Assessment can be controversial. Beliefs on assessment range from "State tests are a ridiculous waste of time, morally corrupt, and students don't try on them so they're meaningless," to "The worth of all schools should be determined solely on the results of one test." At the core of this dissonance we discover different demands for the information an assessment system yields. So as you study your own comprehensive system, keep this in mind.

Students want assessments that help them learn more. They need feedback. Models of what they're supposed to do help them see where they fall short and figure out how to fix it. They are skeptical of an assessment system that just rates them and doesn't provide feedback for improvement. They need more than a grade. They need a path to success driven by immediate, continuous, and specific feedback.

Teachers want assessments that lead them in the right direction instructionally – that provide insight into how and what children are learning so they can plan for student success. They are skeptical of being judged by high stakes student results, impacted by things outside of school control – students who are sick, tired, hungry, angry, or distracted.

Parents want sound data on how their children are performing in school. They want to know about problem areas, what home supports can help their child learn, and what is going on at school for their child. They are worried their children won't learn what they need to know to be successful in school and in life.

Taxpayers want to know if they're getting their money's worth, in their own schools and across the country. Their hope is that schools are educating students to carry on our democracy and economy. They want solid proof of progress. They are fearful the investment made in education may be squandered and result in societal demise, if that is the case.

Policy makers want public investment in education to yield tangible results. They want to help the children, communities and economies of their constituents and be able to demonstrate the value of what they bring back home. Elected officials strive to contribute to the well-being of the citizenry. They are worried about achieving results for students, balancing budgets, taxing sensibly, and spending wisely or resultant voter backlash if not.

Despite all of the stakeholders' clamoring for proof of learning, whether or not you believe high stakes tests are here to stay, we know that a solid assessment system can help schools move student learning forward. The district must communicate well, without fear, the story and implications that the assessment data produces, to meet the distinct data needs of stakeholders while fueling the fires of instructional improvement.

## Comprehensive/Balanced Assessment Systems

Many schools have put together descriptions of their District Assessment Systems to share with school leaders, their staff and the public. The Des Moines school board members reviewed their district's matrix just this week at a board meeting. We also have an adapted version that may simplify the conversation if you are just getting started.

## \*Balanced Assessment System

Includes a balance of assessment types (project based, performance tasks, labs, constructed response, multiple choice, etc.) for all content areas.

	<b>Classroom unit/daily formative assessments</b>	<b>Common formative assessments</b>	<b>Classroom/common summative assessments</b>	<b>District standards based assessments</b>	<b>External interim assessments</b>	<b>External summative assessments</b>
<b>Purpose</b>	<ul style="list-style-type: none"> <li>• Measure student understanding of small pieces of content, skills, and procedures</li> <li>• Guidance to teacher on areas that are not attained and need to be re-taught</li> <li>• Indicator of student readiness for next concept</li> <li>• Real time adjustment to learning</li> </ul>	<ul style="list-style-type: none"> <li>• Support instruction through the Data Team process</li> <li>• Measure student understanding of small pieces of content, skills, and procedures</li> <li>• Guidance to teacher on areas that are not attained and need to be retaught</li> <li>• Indicator of student readiness for next concept</li> <li>• Real time adjustment to teaching and learning</li> </ul>	<ul style="list-style-type: none"> <li>• Measure attainment of standards from interval of instruction just completed</li> <li>• Measure retention of stepping-stone concepts from previous interval</li> <li>• Give guidance to teacher to re-teach, change strategies, and identify student needs before end of year/course</li> <li>• Predictors of success on standards based assessments</li> <li>• Student grade determination</li> </ul>	<ul style="list-style-type: none"> <li>• Measure grade/course level of attainment of standards</li> <li>• Use to inform annual instructional pacing and strategies</li> <li>• Possibly used as part of student grade determination</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor student progress</li> <li>• Shows what needs to be addressed to meet student needs</li> <li>• Predict performance on the Iowa Assessments</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate cumulative learning</li> <li>• Make decisions about schools (and subgroups)</li> <li>• Measure grade/course level attainment of concepts</li> <li>• Use to inform annual curriculum guides</li> <li>• Progress report to public/accountability</li> <li>• Provide information for future planning</li> </ul>
<b>Examples</b>	Student response systems, student-teacher conferences, student self-monitoring systems, student demonstration of knowledge, Writing to Learn	Projects, performance based tasks, short quizzes, Writing to Learn	Unit or quarterly exams, final project, performance based tasks, portfolios	District developed course standards based exam, unit/semester benchmarks	Scholastic Reading Inventory, BRI, ARI, PA Profile, MAP Tests, Skills Iowa	Iowa Assessments, EXPLORE, ACT, AP exams, vocational assessments, MAP Tests
<b>Responsible for creation</b>	Classroom teachers	Data Teams/PLCs	Classroom teachers or Data Teams/PLCs	District curricular teams	External group of experts	External group of experts
<b>Report to...</b>	Teacher and Students	Teacher, students, Data Team	Data Team, teacher, students, and parent	District, teacher, student, and parent	District, teacher, student and parent	State/federal/AEA, school board/public, district, teacher, and student

\* This is adapted from the Des Moines Community School District's assessment plan. Thanks to the folks at DMPS for allowing us to share it.

## Assessment Matrix

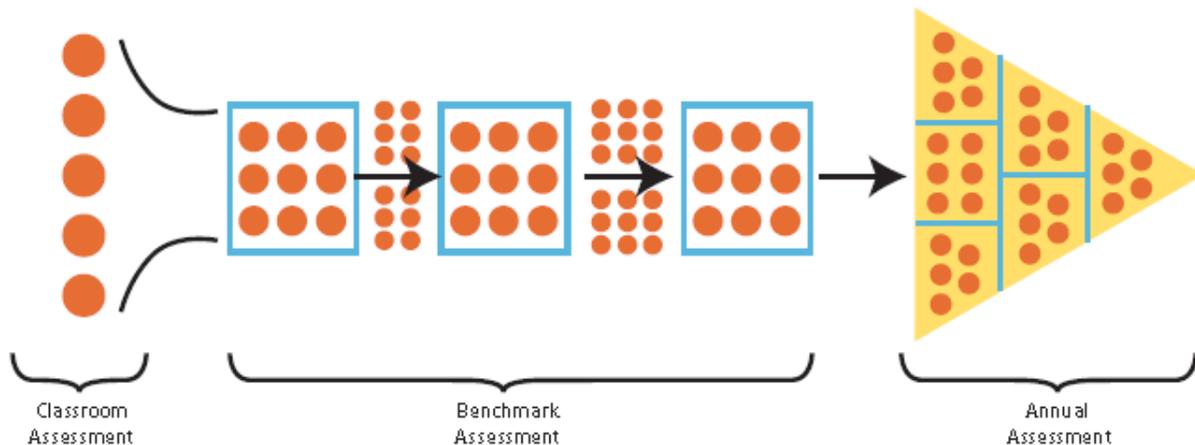
We used DMPS's fine document when we developed this matrix. We thought it would be nice to have two different examples.

	<b>Formative</b>	<b>Interim</b>	<b>Summative</b>
<b>Purpose</b>	<ul style="list-style-type: none"> <li>• Monitor student progress</li> <li>• Measure student understanding of small pieces of content, skills, and procedures</li> <li>• Develop deeper student understanding of where to go next in their own learning</li> <li>• Guidance to teacher on areas that are not attained and need to be retaught</li> <li>• Indicator of student readiness for next concept</li> <li>• Real time adjustment to learning</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor student progress</li> <li>• Show what needs to be addressed to meet student needs</li> <li>• Develop deeper student understanding of where to go next in their own learning</li> <li>• Measure attainment of standards from interval of instruction just completed</li> <li>• Measure retention of stepping-stone concepts from previous interval</li> <li>• Give guidance to teacher to re-teach, change strategies, and identify student needs before end of year/course</li> <li>• Can provide information for student grade determination</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate cumulative learning</li> <li>• Make decisions about schools and subgroups</li> <li>• Measure grade/course level attainment of concepts</li> <li>• Use to inform annual curriculum guides</li> <li>• Progress report to public/accountability</li> <li>• Provide information for future planning</li> <li>• Measure grade/course level of attainment of standards</li> <li>• Use to inform annual instructional pacing and strategies</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Student demonstrations of learning with immediate feedback provided verbally, in writing, or through further instruction, i.e. response systems, discussions, homework, teacher-prepared assessments, models, writing samples, etc.</li> <li>• Student Self-Monitoring Systems</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmark Assessments</li> <li>• Semester and Quarter Classroom Assessments</li> <li>• Major Projects</li> <li>• Performance-Based Tasks</li> <li>• Portfolios of Student Work</li> </ul>	<ul style="list-style-type: none"> <li>• Iowa Assessments</li> <li>• ACT</li> <li>• End-of-Course Exams</li> <li>• Vocational Assessments</li> <li>• Performance-Based Tasks</li> <li>• Portfolios of Student Work</li> </ul>
<b>Responsible for Creation</b>	<ul style="list-style-type: none"> <li>• Classroom Teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative Teams</li> <li>• Central Office</li> <li>• External Providers</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative Teams</li> <li>• Central Office</li> <li>• External Providers</li> </ul>
Report to	<ul style="list-style-type: none"> <li>• Teacher</li> <li>• Students</li> <li>• Sometimes Principals</li> <li>• Sometimes Parents</li> </ul>	<ul style="list-style-type: none"> <li>• School Board</li> <li>• Public</li> <li>• District</li> <li>• Principals</li> <li>• Collaborative Teams</li> <li>• Teacher</li> <li>• Students</li> <li>• Parents</li> </ul>	<ul style="list-style-type: none"> <li>• State and Federal Governments</li> <li>• AEAs</li> <li>• School Board</li> <li>• Public</li> <li>• District</li> <li>• Principals</li> <li>• Teacher</li> <li>• Students</li> <li>• Parents</li> </ul>

The National Research Council (2001) defines a quality assessment system as:

1. **Coherent:** clear specification of the *goal(s)* to be measured, *tasks* designed or selected to reflect the learning goal(s), and an appropriate *interpretation* framework is applied to student responses to reach valid conclusions about student learning; (Herman, Joan L., [Coherence, Key to Next Generation Assessment Success](#), 2010).
2. **Comprehensive:** benchmark/interim, performance tasks, and end-of-year assessments, all providing students with information regarding their achievement, growth, and progress toward college- and career-readiness [Next Generation Assessment Systems Proposed Under Race to the Top Program](#). Comprehensive assessment systems were reported by [Research Watch](#) as being composed of formative, benchmark, and summative assessment.
3. **Continuous:** Assessment is an ongoing process, not a one-time event.

Joan Herman, Ellen Osmundson and Ron Dietel write for the Assessment and Accountability Center, a well-respected assessment partnership between CRESST and West Ed. They identify a [continuum of assessments](#).



Assessment experts tell us the first thing we have to consider is what we are trying to assess. Next we can determine how to assess curricular outcomes and ensure the assessments are indeed assessing what we want to know. We should anticipate and make sure they yield similar results over time and over groups of students.

There are several forms of assessment and they're all important.

## Summative Assessment

Summative assessment, perhaps the most controversial of assessments, drives so many important decisions based on their results; decisions like whether a school or district will be designated as in need of assistance and the penalties accompanying that designation, are good examples. Last year in the Iowa Legislature, it was determined that the Iowa Assessments would be our state test until the State Board of Education, the Legislature, and the Governor can all agree we need a different accountability measure. This comes at a time when the Iowa Department of Education is working as a governing member with the [Smarter Balanced](#)

[Assessment Consortium](#) with 24 other states to develop 21<sup>st</sup> century tests aligned to the Common Core Curriculum. Certainly there consensus to be built among policy makers as this conversation unfolds.

The Iowa Department of Education has [helpful resources](#) about assessment. Summative assessment is defined this way by the Iowa DE, “Assessment(s) of Learning (Summative Assessments) are given at a point in time to measure and monitor student learning. They provide the feedback to educators, students, parents, and community members and are used to make adjustments in instructional programs, report student progress, identify and place students, and grade students.” In Iowa, the Iowa Assessments are the summative assessments that determine whether schools or districts will be identified as a School or District in Need of Assistance. Information about the Iowa Assessments can be found at the [Iowa Testing Program](#).

James Popham, professor emeritus at UCLA, recommends that all assessments be instructionally sensitive – in other words, the assessment, no matter whether it is formative or summative, informs educators where to go next in instruction. In this [video clip](#), Popham comments on formative and summative assessment.

This [video from Edutopia](#) discusses authentic summative assessment as it is done in one school in California.

## **Benchmark Assessment**

Herman, Osmundson and Dietel write about benchmarks in [Benchmark Assessment for Improved Learning](#). We know schools have multiple classroom assessments and certainly the annual assessment. But it’s the benchmark that is sometimes missing. This article notes, “Where do benchmark assessments fit in a balanced assessment system? While annual state assessments provide a general indicator of how students are doing relative to annual learning standards, and while formative assessment is embedded in ongoing classroom instruction to inform immediate teaching and learning goals, benchmark assessments occupy a middle position strategically located and administered outside daily classroom use but inside the school and/or district curriculum. Often uniform in timing and content across classrooms and schools, benchmark assessment results can be aggregated at the classroom, grade, school, and district levels to school and district decision-makers, as well as to teachers. This interim indication of how well students are learning can fuel action, where needed, and accelerate progress toward annual goals.” There is some research that suggests benchmark assessments don’t move student learning. That is certainly not a surprise if central office folks are the only people looking at the benchmark data. Benchmarks are filled with useful student learning information that if seen and used by individual teachers and collaborative teams can be used to guide instruction. [Skills Iowa](#) can help you with benchmarking.

## **Formative Assessment**

[Formative assessment is defined](#) this way on the Iowa DE website: “Assessment for Learning (Formative Assessment) is a process used by teachers and students as part of instruction that provides feedback to adjust ongoing teaching and learning to improve students’ achievement of core content. As assessment for learning, formative assessment practices provide students with clear learning targets, examples and models of strong and weak work, regular descriptive feedback, and the ability to self-assess, track learning, and set goals. (Adapted from Council of Chief State School Officers, FAST SCASS)”

Black and Wiliam, in their tried and true research published in the *Phi Delta Kappan*, note this about formative assessment,

“All these studies (about formative assessment) show that innovations that include strengthening the practice of formative assessment produce significant and often substantial learning gains. These studies range over age groups from 5-year-olds to university undergraduates, across several school

subjects, and over several countries. Typical effect sizes of the formative assessment experiments were between 0.4 and 0.7. These effect sizes are larger than most of those found for educational interventions.”

[Formative assessment: An enabler of learning](#) by Margaret Heritage, who has worked extensively in Iowa, is a comprehensive description of formative assessment. Dr. Heritage notes these ideas, among others, related to formative assessment:

- Formative assessment is not a kind of test.
- Formative assessment practice, when implemented effectively, can have powerful effects on learning.
- Formative assessment involves teachers making adjustments to their instruction based on evidence collected, and providing students with feedback that helps them advance their learning
- Students participate in the practice of formative assessment through self and peer-assessment.

[Healthier Testing Made Easy](#) by assessment expert Grant Wiggins, published by [Edutopia](#), introduces a radical idea, “We need more assessment, not less.” He notes, “Substitute *feedback* for *assessment*, and you'll better understand what I mean. The point of assessment in education is to advance learning, not to merely audit absorption of facts. That's true whether we're talking about that fourth-period pop quiz, the school play, or the state test. No one ever mastered a complicated idea or skill the first -- or fifth -- time. To reach any genuine standard, we need lots of trials, errors, and adjustments based on feedback. Think of assessment, then, as information for improving. This idea takes a while to get used to if you teach, test, and move on. The research could not be clearer, though: Increasing formative assessment is the key to improvement on tests of all kinds, including traditional ones. And more "authentic" and comprehensive forms of assessment provide not only significant gains on conventional tests but also more useful feedback (because the tasks are more realistic).”

## Communicating Assessment Results

Schools are mandated in Iowa law to communicate some assessment results to parents, the community, and the state and federal governments. It's important for staff members at the school to be able to answer these questions (so they have a deep understanding of the assessments they are asking students to engage in) and for the answers to these questions to be communicated to the public:

1. What outcome is the assessment measuring? (Is a student able to write a point of view paper in language arts? Can a student identify letters and numbers? Did the student learn the important outcomes in this class during the year? Did a student learn the main objectives of a certain unit of study? Is a student on target to achieve the objectives of this class by the end of the year? Etc.)
2. What is the purpose of the assessment? (Adjust instruction based on student need? Help student understand more thoroughly where he is in the learning progression? Understanding of curriculum implementation? Program evaluation? Etc.)
3. Who will be taking the assessment? (All students? Students in a certain class? Students at a certain grade level? Etc.)
4. Who will see the results of assessments? (Students? Parents? Teachers? Principals? District Level Staff? The Community? The federal government? Different assessments have different audiences.)
5. What will we do with the results? (Provide additional instruction? Change the curriculum? Provide more practice for students? Add or eliminate certain classes? Submit them to the state or federal government for accountability purposes? Etc.)

Here are some ways we recommend you communicate about assessment to the public:

- Post your District Wide Assessment Plan on your website in an easy to read and understand format like the example from Des Moines noted earlier in this newsletter.
- Present the Assessment Plan to the school board at a public meeting. Be ready to answer questions the school board may have and consider recommendations they may offer.
- Publish a description of the District Wide Assessment Plan in the local newspaper.
- Include the District Wide Assessment Plan with examples in your district newsletter.
- If there are other media outlets available, like web casts, radio, etc., use them to let the public know how hard you are working to use assessment to drive student growth in your district.
- Present student performance results throughout the year. Don't just share the Iowa Tests. Let your public know you assess student performance in many ways, because you know that multiple assessments of student progress give you a much clearer picture of how students are doing.

Most importantly, if the news the assessment data offers isn't good, don't make excuses. Present the data, share what the implications of the data are, and tell the audience what you intend to do as a result of what the data indicates. Jordan Halperin in Forbes Magazine offers [some excellent tips](#) in communicating bad news. While he comes at it from a business perspective, these ideas certainly have relevance in the education world.

- **“Be prepared.** If your content looks unprofessional, you lose credibility as a presenter and the way your message is interpreted may be impacted. Know the facts of the situation so that your message is as clear as possible. Rehearse so you know your points forward and backward and be prepared to answer difficult questions.”
- **“Be direct.** Get right to the points and state them honestly and directly.”
- **“Be appropriately upbeat.** I'm not suggesting that you bring in cheerleaders or a musical act for this sort of communication, but a dour tone and sulking presentation will not raise the spirits of your audience. Expressing confidence that you are on top of the matter and that it is being managed is key. Praise the achievements and effort expended by the group despite the negative result.”
- **“Show the path.** What is most important at the end of the day is what will result from the statements and presenting these next steps in a positive and persuasive fashion. It is very possible that there may be negative resulting actions (possibilities include layoffs, closings, etc.). There will be positives as well (maybe a stronger resulting business, more focused initiatives, etc.) and these points should be the focus of the message, including the learning experience that resulted from the negative event. Do your research and cite RELEVANT historical references and build confidence that there is light at the end of the tunnel.”

## Conclusion

We hope you find this information about assessment useful. If you have any questions or suggestions, please let us know. Our knowledge and skills related to any topic are enhanced when you share what you know with us. If we can be of help in developing your assessment plan, be sure to call.

If you have strong feelings about policy related to assessment, check out this [Issue Brief on Assessment](#) at the [ISFIS Web Page](#). Margaret can help you with any message you might want to share with your local legislator related to education.

## Useful Websites and Apps

[Bedtime Math](#), a **website** featured in [Time Magazine](#), began when parent Laura Overdeck came up with the idea of adding ever day math experiences to her children’s bed time routine of reading together. She shared her ideas with a dozen friends and nine months later, her website grew to 20,000 subscribers. She provides math problems for parents to discuss with children at three levels – wee ones, little kids, and big kids.

### [Common Core Standards \(free\)](#)

This **app** by Mastery Connect provides a list of the Common Core State Standards you can carry with you in your smart phone.

### **Barefoot World Atlas (\$4.99)**

[Barefoot World Atlas](#) is “... an interactive atlas for the digital age. This engaging and educational **app** vividly communicates how all parts of our world are interconnected and reveals some of the ideas and initiatives that are helping to shape a sustainable future. Young children will delight in playing with the 3D globe and exploring its features; while older children can delve deeper to discover a wealth of facts and insights including live data for every country...”

## Quotes

If we all work together, we can replace assessments that are often narrow one-shot tests of skills divorced from the school curriculum with an assessment system that is comprehensive in merging a mix of measurement approaches, coherent in its link to sophisticated models of learning and its alignment with the curriculum, and continuous in linking each student’s performance over time.

*James Pellegrino in [Knowing What Students Know](#)*

“The more you teach without finding out who understands the information and who doesn’t, the greater the likelihood that only already-proficient students will succeed.”

*Grant Wiggins*

“The research indicates that improving learning through assessment depends on five, deceptively simple, key factors:

- the provision of effective feedback to pupils,
- the active involvement of pupils in their own learning,
- adjusting teaching to take account of the results of assessment,
- a recognition of the profound influence assessment has on the motivation and self-esteem of pupils, both of which are crucial influences on learning, and
- the need for pupils to be able to assess themselves and understand how to improve

*Paul Black and Dylan Wiliam*

“The important question is not how assessment is defined but whether assessment information is used... “

*Palomba & Banta*