

ASSESSMENT 101

Supporting High Quality Assessment Systems

Training Goals

Upon completion of this module school board members will learn:

- The role of school boards in supporting a system of high-quality, aligned, and streamlined student assessments.
- The characteristics of high-quality assessments.
- How school boards can support use of the Student Assessment Inventory for School Districts by district personnel to
 - take stock of student assessments; and
 - determine the minimum testing necessary to serve essential diagnostic, instructional and accountability purposes.

APPROXIMATE TRAINING TIME

- Part 1: The student assessment environment (30 minutes)
- Part 2: The role of school boards in supporting a system of high quality assessments (90 minutes)

Before we start

- While we generally use the term "assessment" in this training, the word "test" is used interchangeably with assessment.
- A glossary of key terms used in this training is provided as a quick reference.
- Reference materials have provided for topics that you may want to explore further.
- The focus for this training is student assessment. This training does not address assessment as it relates to staff (teacher and/or school leader) evaluation. However, the process of taking stock may include assessments used for staff evaluation.



PART 1 – The Student Assessment Environment

Why do we give assessments?

Think about an assessment that is valuable or useful to you as a board member. What makes it valuable or useful?

THERE ARE MANY FORMS OF STUDENT ASSESSMENT. A FEW EXAMPLES:

Essays	Journals
Portfolios	Quizzes
Performance assessments	Exit question
Individual and group projects	Structured observation

STANDARDIZED ASSESSMENTS ARE JUST ONE TYPE OF ASSESSMENT

- Standardized tests are large-scale tests that are administered to students and scored in the same manner. Students take the same test in the same conditions and, if possible, at the same time so that results can be attributed to student performance and not to differences in the test or the way it is given.
 Because of this, the results of standardized tests can be compared across schools and districts.¹
- Standardized student assessments are necessary when we want to make comparisons in performance. The comparison may be of one group of students (e.g., 4th grade students at Main Street Elementary) to another

group of students (e.g., all 4th grade students in the state).

- Any form of assessment could become a standardized assessment by meeting the two requirements stated in the definition above. Some forms of assessments are more readily implemented as standardized tests (e.g., a multiple-choice test) due to cost and time constraints.
- Teachers use a variety of assessments to evaluate student learning ranging from standardized assessments to individual (non-standardized) assessments tailored to a particular student.

STUDENT ASSESSMENTS ARE A FREQUENT HOT TOPIC FOR STATES AND SCHOOL DISTRICTS

There are dozens of articles in the media every week about student assessments. Here are just a few sample headlines.

Limits proposed on standardized school testing — 2% of class time (Maryland)

General Assembly bill looks to curb testing culture in Virginia's schools

Local schools wary of new online ISTEP (Indiana)

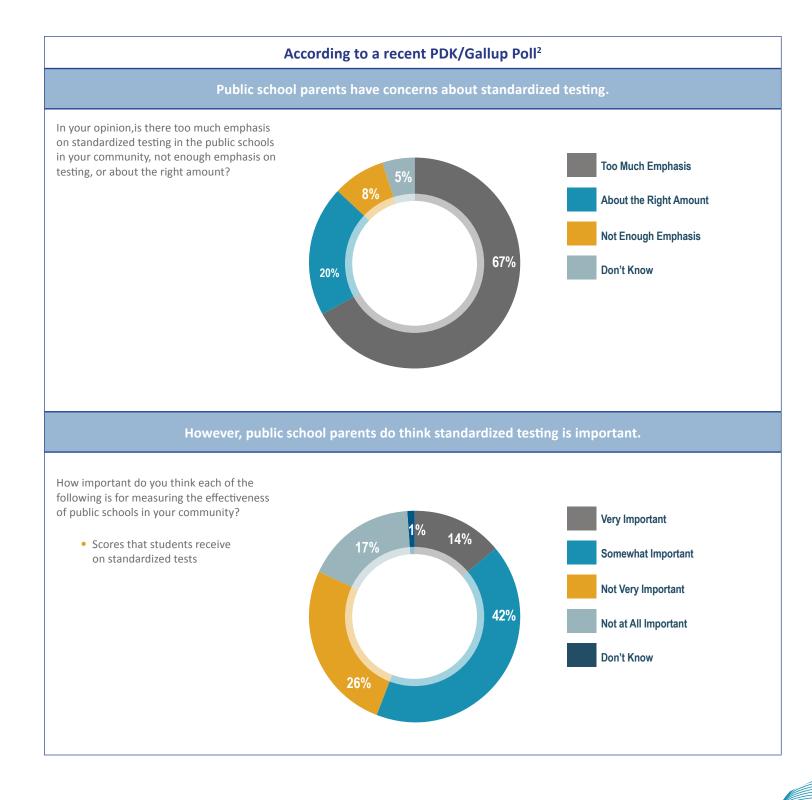
Wyoming lawmakers move to reduce testing time, keep ACT

Boston Public Schools reduces district-required testing by half in lower-performing schools, sharing concerns raised over the amount of testing

Cocalico teachers to school board: 'standardized testing is harming students' (Pennsylvania)

Parents, teachers, voice concerns over standardized testing at Jersey City meeting (New Jersey)





² Phi Delta Kappa/Gallup. (2015). *The 46th Annual PDK/Gallup Poll on of the Public's Attitudes Toward the Public Schools*. <u>http://pdkpoll2015.pdkintl.org/wp-content/uploads/2015/10/pdkpoll47_2015.pdf</u>



FINDINGS FROM ACHIEVE'S NATIONAL POLL OF PARENTS AND VOTERS ON ASSESSMENTS

- Parents and voters know very little about new state assessments.
- Basic information, especially information that explains why the new assessments are good for students, is badly needed.
- Tests that are most valued measure real learning, assess problem solving and critical thinking, and determine baselines for knowledge.
- However, a plurality of voters and a majority of parents say students are given too many standardized tests in public schools.

What concerns about student assessment are you hearing in your community?

What strategies are you currently using to address these concerns?

This training is designed to help you address these concerns

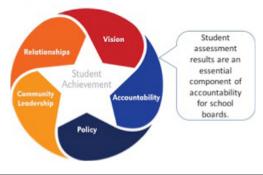
- A high quality, coherent, and aligned assessment system should ease these concerns.
- The remaining slides in Part 1 will help you understand the critical role of school boards in supporting high quality assessment systems.
- Part 2 will give you

 a background on
 assessments in order to
 ask the right questions
 about testing.
- Part 3 of the training provides a process for regularly monitoring and evaluating the assessment system so that these concerns about testing can be addressed in a more proactive manner.

WHY IS ASSESSMENT IMPORTANT TO SCHOOL BOARD GOVERNANCE?

- High-quality assessments are effective tools that students, parents, and educators can use to understand and measure student progress in a meaningful way.
- Student assessments at the classroom, school, district and state levels – are used to make critical decisions about instruction, interventions and support, advanced educational opportunities, and policies.
- High-quality, standardized assessments are essential for evaluating equity.
- A comprehensive system of high-quality assessments should be an efficient system, which produces the necessary information with the least amount of assessment.
- District leaders have a critical role to play in communicating and leading efforts to improve assessment quality and reduce unnecessary burden.
- Student assessment data informs board action aimed at improving student achievement.
- The quality of assessments, and consequently quality of assessment data, has a direct impact on the quality of action (decisions) a school board can take.

NSBA Key Work of School Boards





RESEARCH ON STUDENT ASSESSMENT INFORMATION SUPPORTING SCHOOL BOARD GOVERNANCE³

- Effective boards are data savvy; they embrace and monitor data, even when the information is negative, and use it to drive continuous improvement.
- Lighthouse Project: Began with the Iowa Association of School Boards to investigate the connection between board practices and student achievement.
- Research indicates that considering appropriate assessment data in decision-making can improve the quality of instruction, which is directly connected to improving student learning.

PART 2 – Role of school boards in providing a system of student assessments

What is the role of school boards in providing a system of student assessments?

- 1) Ensure assessments are high quality.
- 2) Ensure assessments are part of a coherent, comprehensive system.
- Ensure the assessment system and results are communicated to students, parents, teachers, and the public.
- 4) Ensure appropriate confidentiality of assessment information.
- Ensure effective procurement and allocation of resources to implement a high-quality, coherent, and comprehensive assessment system.

³ http://www.centerforpubliceducation.org/Main-Menu/Public-education/Eight-characteristics-of-effective-school-boards/Eightcharacteristics-of-effective-school-boards.html



1) Ensure assessments are high quality

CHARACTERISTICS OF HIGH-QUALITY ASSESSMENTS

- Valid
- Aligned to state standards
- Accessible to all students

Key Questions About Assessment Quality			
Validity What are the intended uses of the assessment results?			
ValidityIs there evidence the assessment results can be used in the manner intended? Are the cla inferences, or consequences based on the assessment justified?			
Alignment	Is there evidence the assessment is aligned to the learning standards?		
AlignmentWhen will the assessment be administered? And is the assessment aligned to the sequence for the time covered?			
Accessibility Were the items (questions) on the assessment developed to remove potential challenges due factors such as disability, ethnicity, culture, geographic location, socioeconomic condition, or g			
Accessibility Does the assessment provide accommodations and modifications for students with disabili and English language learners?			

VALID

Validity of an assessment = Validity refers to the degree to which an assessment's results are representative of the actual knowledge and/or skills it is designed to measure AND whether the assessment results can be used to make accurate conclusions about the knowledge and/or skills. The key question is, "Is the assessment valid for the intended purpose?"

Or

"Is it appropriate to use the results of the assessment in the way which we intend to use them?"

What follows are a couple of examples to illustrate the key question, "Is the assessment valid for the intended purpose?"



An Everyday Example				
Example Assessment Intended Use of Assessment Results		Is the assessment valid for the intended purpose?		
	To determine how to dress	<u>Yes</u>		
A thermometer	To determine if an umbrella is needed	<u>No</u>		
	To determine if sunglasses are needed	<u>No</u>		

An Education Example				
Example Assessment	Intended Use of Assessment Results	Is the assessment valid for the intended purpose?		
An end-of-year assessment of 4th grade language arts knowledge and skills	To evaluate if a 4th grade student has general mastery of 4th grade language arts knowledge and skills	<u>Yes</u>		
	To diagnose specific 4th grade language arts skills (e.g., use relative pronouns) that a 4th grade student has not mastered	<u>No</u> An end-of-year assessment may not measure all knowledge and skills that a student is expected to master AND an end-of-year assessment generally does not measure one skill sufficiently for making a skill-specific diagnosis.		
	To determine the effectiveness of a 4th grade language arts instructional program aligned to the 4th grade English language arts knowledge and skills.	<u>Possibly</u> Additional information would be needed like prior year test results on the same assessment, effectiveness of implementation, etc.		



The higher the stakes for an assessment the more evidence of validity is required. Here are some examples of the difference in evidence that might be required for a lower stakes vs. a higher states assessment.

Examples of Validity Evidence				
Classroom Summative Assessment (Lower stakes)assessment and before administering it, asking another teacher to review the test alignment witha		After writing an original classroom summative assessment and before administering it, asking another teacher to review the test alignment with the learning standards being assessed		
State Standardized Assessment (Higher stakes)	An independent study of expert ratings of the alignment of the assessment items to the standards being assessed	A statistical analysis of the relationship between sub-domains of the assessment (e.g., on a language arts assessment, the relationship between student performance on the sub-domains of reading, writing, and grammar)		

ALIGNED TO STATE STANDARDS

Alignment of an assessment = Alignment refers to the degree to which an assessment covers the *breadth* and *depth* of the learning standards.

Breadth = How well does the assessment cover the full range of learning standards?

Depth = How well does the assessment allow students to demonstrate the range of higher-order, analytical thinking skills associated with a learning standard?

An example of depth of learning standards				
Increasing Depth/Complexity	Identify a pattern	1, 3, 5, 7, 9		
	Extend a pattern	What will the 15th number in the pattern be?		
	Write a rule in words or symbols for the pattern	What is the arithmetic rule for this pattern?		



An example of a lower depth/complexity assessment item

Which of the following numbers will round to 26??

- a) 25.3
- b) 25.5
- c) 26.7
- d) 27.1

Item B⁵ – An example of a higher depth/complexity assessment item

	Capacity	of	different	baseball	stadiums	
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San Francisco Giants' stadium:	41,915 seats
Washington Nationals' stadium:	41,888 seats
San Diego Padres' stadium:	42 445 seats

Jeff said, "I get the same number when I round all three numbers of seats in these stadiums."

Sara said, "When I round them, I get the same number for two of the stadiums but a *different* number for the other stadium."

Can Jeff and Sara both be correct? Explain how you know.

What is the same about items A and B?

What is different about items A and B?

The timing and sequence of an assessment can also impact the degree of alignment.

For example, an assessment may be aligned to 4th grade mathematics learning standards, but if the assessment is administered after the first nine weeks of school there may be knowledge or skills that have not yet been taught. That is, the assessment given at the end of the first nine weeks might not be aligned to the instructional sequence for the first nine weeks of school.



ACCESSIBLE TO ALL STUDENTS

During the assessment development process, the items were reviewed to remove potential bias due to factors such as disability, ethnicity, culture, geographic location, socioeconomic condition, or gender so that an item would be easier or more difficult for a student based on some characteristic that has nothing to do with how much he knows about the content being assessed.

Accessible assessment = For students with disabilities or English language learners the assessment allows the student to show what she knows without changing what is being assessed. Examples:

- Extended testing time for an English language learner to complete the assessment.
- Text-to-speech feature on a computer-based assessment for students with a learning disability or visual impairment.
- Extra time for a student that has a reading disability.
- Use of a word-for-word translation dictionary for an English learner taking a math assessment.

2) Ensure assessments are part of a coherent, comprehensive system

CHARACTERISTICS OF A COHERENT, COMPREHENSIVE SYSTEM OF ASSESSMENTS

- Different types of assessments
- Meets essential instructional, program, and accountability purposes
- Balanced

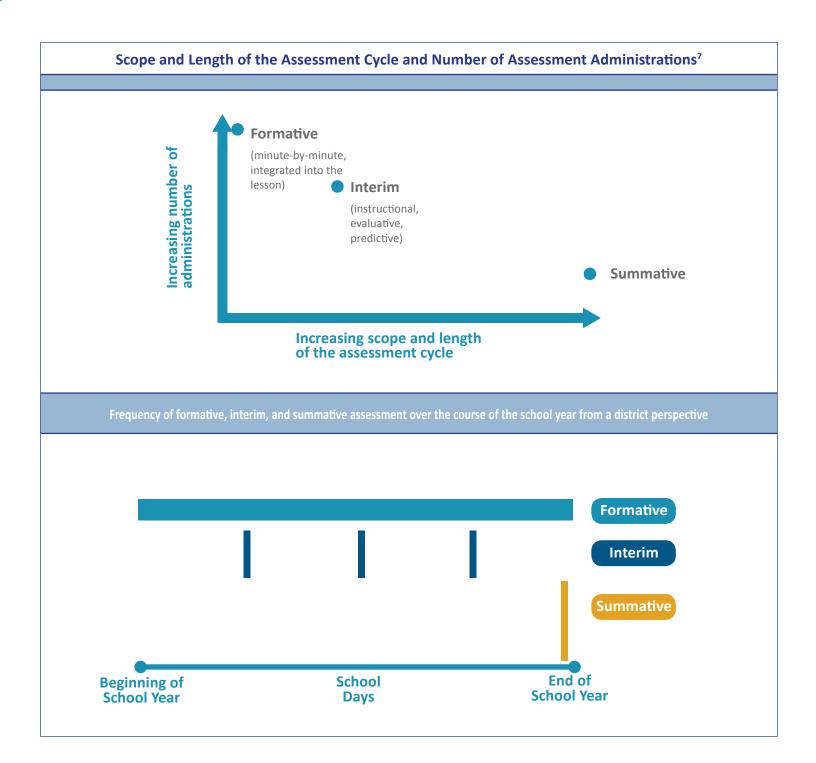
TYPES OF ASSESSMENT⁶

- Summative = generally given one time at the end of some unit of time (end of a course, end of school year) to evaluate students' performance against a defined set of learning standards.
- Formative = assessments that are small-scale (a few seconds, a few minutes, certainly less than a class period) and short-cycle (they are often called "minute-by-minute" assessment or formative instruction) for the purpose of providing feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes.
- Interim = assessments that fall between formative and summative assessment; these assessments (1) evaluate students' knowledge and skills relative to a specific set of academic goals, typically within a limited time frame, and (2) are designed to inform decisions at both the classroom and beyond the classroom level, such as the school or district level for instructional, evaluative, or predictive purposes.

NOTE: Assessment vendors often refer to interim assessments as defined above as *formative* assessments. It is important to know that there is not universal agreement on the meanings of *formative* and *interim* assessment (and sometimes even *summative* assessment).

⁶ Perie, M., Marion, S., Gong, B., & Wurtzel, J. (2007). *The role of interim assessments in a comprehensive assessment system*. Aspen, CO: Aspen Institute.





⁷ Based on a chart created by Perie, M., Marion, S., Gong, B., & Wurtzel, J. (2007). The role of interim assessments in a comprehensive assessment system. Aspen, CO: Aspen Institute.



Balanced to meet essential instructional, program, and accountability purposes					
Purpose ⁸ Decision to Be Made		Who is Making the Decision	Type of Assessment		
Instructional	Mal What teaching or learning comes next? Teachers, students, and sometimes parents		Formative		
Diagnostic Are standards being mastered? What interventions might be needed?		Teachers, students, and parents	Formative or Interim		
Accountability Are enough students meeting standards?*		Superintendent, school board	Summative		
Program Evaluation Is the instructional program improving student outcomes?		Teacher teams, instructional leaders, principal, curriculum director, superintendent, school board	Interim and Summative		

***NOTE:** The answer to this question also has implications for leadership, resource allocation, and policy decisions.

ACCESSIBLE TO ALL STUDENTS

Assessment expert, Rick Stiggins⁹, on a balanced assessment system:

"No single assessment is capable of answering all of these questions."

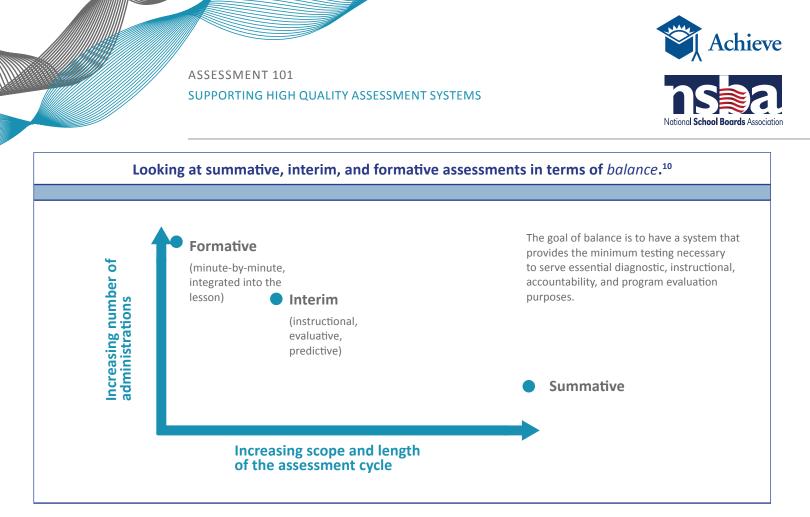
"Clearly, an assessment system that fails to meet the information needs

of any of these important decision makers at any of these levels places

students directly in harm's way due to inept instructional decision making."

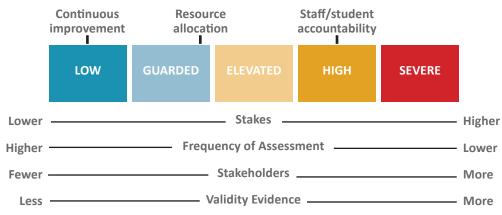
⁸ Table with modifications is based on: Stiggins, R.J. (2008) *Assessment Manifesto: A Call for the Development of Balance Assessment Systems*. A position paper published by the ETS Assessment Training Institute, Portland, Oregon.

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EXERCISE 3: FORMATIVE, INTERIM, SUMMATIVE

- List some of the assessments given in your district, either by name or type (e.g., NWEA MAP, early literacy assessment, Advanced Placement exams).
- Place each assessment into the appropriate category based on the definitions of formative, interim, and summative assessment we are using.
- Identify any assessments that are named or categorized in a way that contradicts our definitions. For example, an assessment that is currently called formative, but really fits the definition of an interim assessment.



Whether the assessment stakes are lower or higher impacts the frequency, validity evidence, and stakeholder involvement accountability purposes

¹⁰ Based on a chart created by Perie, M., Marion, S., Gong, B., & Wurtzel, J. (2007). *The role of interim assessments in a comprehensive assessment system*. Aspen, CO: Aspen Institute.



3) Ensure the assessment system and results are communicated to students, parents, teachers, and the public

Three keys to communication

- Commitment to transparency
- Timely public reporting
- Presentation of results in a format that is easily understood, accurate, and actionable

A) COMMITMENT TO TRANSPARENCY

- Transparency is critical to building trust.
- Effective communication does not happen by accident.
 Effective communication the kind of communication that builds trust and commitment – is intentional and proactive.
- How do you create transparent and effective communication?
- Who? Identify each of the stakeholders to whom you need to communicate. Try to be as specific as possible. For example, we are trying to communicate to "parents of elementary school children in our district" vs. "parents" or "the public." Also, be specific about who is doing the communicating. The school board communicates but the board also provides leadership for how school leaders and teachers communicate.
- ii. What? Identify the key message you are trying to communicate. The message will likely vary depending on the stakeholders/audience. The message to teachers is likely to be different (and probably more detailed) than the message to parents. Those responsible for communicating the message (school board members, district leaders, school leaders) need to stick to the key message to prevent the perception of conflicting or ambiguous communication.

- iii. How? Determine how you will reach each stakeholder group (e.g., email, press releases, newsletters, public forums, social media, etc.). Each point of contact should be tailored by audience and employ multiple avenues of communicating to that specific group. For example, one email or one newsletter is not sufficient for reaching parents of school-age children. In addition, you may need to reach out to the media, parent and community organizations, and social media.
- iv. When? Determine when each message needs to be communicated to the appropriate stakeholders. For example, if students are required to pass an exit exam in order to graduate, you would want to begin informing parents before their students enter high school, upon entering high school, and prior to taking the exit exam. You would want to communicate this information to students and parents in a variety of ways (e.g., student handbook, letter, translation for parents of English learners).
- v. **Be open to feedback.** Communication must be twoway to build trust and support transparency. Determine how you will receive feedback from stakeholders and how to address feedback.
- vi. **Measure the results.** Measure the effectiveness of your communications to make sure you are reaching the identified stakeholders. Effectiveness of communication can be measured in a variety of ways such as focus groups, pre-surveys and post-surveys, and social media measurement tools. Measuring results will help you determine which communications tools work well in general, which work well with specific groups, and which are not effective.



B) TIMELY PUBLIC REPORTING

Timely = results reported in time to be used by stakeholders as intended.

For example, timely reporting of interim assessment results to teachers regarding overall student mastery of selected standards might occur within one week of the interim assessment; reporting of results four weeks after administration of the interim assessment would likely not be timely.

The timing of reporting may not always be in control of the school district, therefore, the reporting time of assessment results may impact decisions about whether an assessment is administered or how the assessment results are used.

C) PRESENTATION OF RESULTS IN A FORMAT THAT IS EASILY UNDERSTOOD, ACCURATE, AND ACTIONABLE

- Presentation needs to meet the needs of each audience/stakeholder group.
- When possible stakeholders should provide feedback to inform what presentation is most effective.
- Examine current score reporting and determine clarity and appropriateness of reports for teachers, parents, students, and the public.

High-quality reporting resources:

- Achieve Sample Student Assessment Reports <u>http://www.achieve.org/about-sample-student-assessment-reports</u>
- Achieve Sample Report Cards
 <u>http://www.achieve.org/public-reporting</u>
- Data Quality Campaign's <u>Empowering Parents and</u> <u>Communities through Quality Public Reporting</u>

4) Ensure appropriate confidentiality of assessment information¹¹

- Define clear roles and responsibilities for all who manage or access assessment data.
- Specify who can access what assessment data and under what conditions. Remember to include potential third-party service providers.
- Specify consequences for violating data access policies and ensure these consequences are known and understood.
- Have a plan for possible data breaches.
- Ensure there is technical capacity to ensure confidentiality.

¹¹ These points are based on: Data Quality Campaign. (October, 2014). *Student Data and Consent Policies: Avoiding Unintended Consequences*. <u>http://dataqualitycampaign.org/files/DQC%20Student%20Data%20Consent%20Policies.pdf</u>



Who has access to the various types of data?					
	Student Data		Teacher Data		School Data
Who	Personally Identifiable*	Aggregate	Personally Identifiable*	Aggregate	Aggregate
Student	V				~
Teacher	V		V		~
Parent	 				~
Principals	V		V		~
District Administrators	 		 		~
School Boards		~		~	
Public and Press		~		~	

*Personally identifiable data is only available to the person whose data it is (e.g., a student's own data) or to individuals responsible for a student (e.g., classroom teachers of a child, the principal in the child's school).

5) Ensure effective procurement and allocation of resources to implement a high-quality, coherent, and comprehensive assessment system

A) PURCHASED (OFF THE SHELF) VS. DISTRICT DEVELOPED ASSESSMENTS

Purchased assessments considerations

- The upfront investment is lower.
- The assessment can be implemented fairly quickly.
- The test publisher will have a system for administration, scoring, and reporting.
- The assessment may not align to the standards or instructional sequence (if administered as an interim assessment).
- Timely reporting and presentation of results in formats for different users may be limited by the publisher's capacity.



• The test publisher is responsible for providing evidence the assessment is high quality (i.e., valid, reliable, accessible).

District-developed assessments considerations

- There is potentially a big upfront investment of time and resources.
- Establishing validity for a district-developed assessment used for program, accountability, or predictive purposes will generally take a year or more.
- The assessment can be designed to align district standards and the instructional sequence (if administered as an interim assessment).
- Systems for administration, scoring, and reporting have to be developed or adapted.
- Timely reporting and presentation of results in formats for different users is within the control of the school district.
- Outside expertise may be required to perform some of the development tasks.

B) ONGOING SUPPORT FOR ASSESSMENT ADMINISTRATION AND EFFECTIVE USE OF ASSESSMENT RESULTS, INCLUDING:

- Assessment literacy for all teachers (as part of onboarding process and ongoing professional development).
- Resources for assessment administration.
- Time and support for collaboration to interpret and use results.

Processes are ongoing! We cannot train people on the parts of the assessment system once and think we are done. Why?

- People need multiple exposures to support learning and increasing skill.
- People are continually entering and exiting the system.

REVIEW: WHAT IS THE ROLE OF SCHOOL BOARDS IN PROVIDING A SYSTEM OF STUDENT ASSESSMENTS?

- 1) Ensure assessments are high quality.
- 2) Ensure assessments are part of a **coherent**, **comprehensive system**.
- Ensure the assessment system and results are communicated to students, parents, teachers, and the public.
- 4) Ensure appropriate **confidentiality of assessment information.**
- Ensure effective procurement and allocation of resources to implement a high-quality, coherent, and comprehensive assessment system.

NEXT STEPS

- How will you use this information to support a highquality, aligned, and streamlined assessment system in your district?
- We have a tool to help you answer that question, *The Student Assessment Inventory for School Districts,* which is addressed in Part 3 of this training.