



TOP 10 TERMS: Data & Assessment Literacy

Introduction

This resource contains ten critical data and assessment literacy terms, along with related key messages from the WI DPI, and links to valuable resources that can broaden and deepen educators' knowledge of these concepts in their work. The "Top 10 Terms" is considered a foundational resource as part of the overall topic of Strategic Assessment Systems (dpi.wi.gov/strategic-assessment).

Each term is intended to provide common vocabulary and cohesive messaging for educators. Rather than listing the terms alphabetically, they are grouped as follows in order to promote connections to [professional learning related to strategic assessment systems](#).

Baseline knowledge

1. ASSESSMENT LITERACY
2. DATA LITERACY

Key aspects of an efficient and effective system

3. STRATEGIC ASSESSMENT SYSTEMS
4. ESSENTIAL LEARNING
5. FORMATIVE PRACTICES
6. INTERIM ASSESSMENT
7. SUMMATIVE ASSESSMENT

Critical components of improvement processes

8. DATA INQUIRY
9. CONTINUOUS IMPROVEMENT
10. WISCONSIN INFORMATION SYSTEM FOR EDUCATORS (WISE)

Using the Terms

Professional development time is valuable. Consider using the "Top 10 Terms" as one of a variety of resources to support educators' professional practice. When considering in what setting and for what purpose to use these terms, feel free to customize it to your own needs.



Possible uses in professional development:

- Share during a faculty meeting to surface experiences with and attitudes toward professional practice
- View during PLC time to apply, extend, and sharpen professional practice
- Use with new or struggling teachers to enhance professional practice and assessment literacy
- Focus on one or two terms with a team to engage in deep reflection about understanding, current practices, connection-making, areas of strength and for growth, etc.

1) ASSESSMENT LITERACY

Assessment literacy is knowing how, when, and why to assess student learning. Assessment literate educators:

- Identify, select, and/or create the most appropriate, efficient, and precise assessments that engage students in demonstrating their knowledge and abilities relative to targeted learning goals;
- Skillfully use a variety of assessment tools and techniques to determine and document, when necessary, what students know and can do;
- Accurately analyze, interpret, and use resulting quantitative and qualitative data generated from assessments to help drive the teaching and learning process, thus advancing students' learning.



KEY MESSAGES - Data & assessment literate educators:

Understand data

- All information is data. Qualitative, quantitative, and anecdotal information is equally important.
- Data represent people. Both students and educators are the faces 'behind' data.
- Data reflect performance, both student outcomes and professional practices.
- Data tells a story. Data is used to celebrate success, spotlight gaps, drive change, and realign resources; data allows educators to synthesize their work and prioritize efforts for continuous improvement.

Work with others to use data

- Promote collaboration and transparency with teams to use data in an intentional and non-threatening manner, always with the goal of advancing student success.
- Ask meaningful and appropriate questions of the data with students, families, and colleagues.
- Have data discussions about both successes and areas of weakness revealed by data with students, families, and colleagues.
- Communicate data findings to derive meaning and promote understanding that is appropriate to the audience, including students, parents, and the public.

Embed data-driven decision-making into continuous improvement processes

- Use evidence to inform practice, adjust instruction, and make decisions to advance student learning, whether through classroom practices or policy decisions.
- Use data to establish, adjust, and evaluate strategic goals.
- Use the most appropriate data for the decision at hand, taking into account validity and reliability.
- Embed the data inquiry process into an ongoing cycle of continuous improvement (e.g. the SLO process).
- Transform data into information that can be applied strategically to improve student outcomes, such that the data leads to action-oriented next steps.

2) DATA LITERACY

Data literacy is knowing how, when, and why to examine student data to drive continuous improvement. Data literate educators:

- Understand data;
- Are confident working with data both independently and collaboratively; and
- Embed data-driven decision-making into continuous improvement processes.

Assessment and data literacy are not mutually exclusive; they are interrelated and dependent on one another to deepen practice.



3) STRATEGIC ASSESSMENT SYSTEMS



Strategic Assessment Systems use comprehensive, systematic and ongoing processes to drive teaching and learning. In a Strategic Assessment System, educators choose high-quality assessment tools and practices, including those that are formative, interim and summative. They purposefully use the resulting information in a coherent manner in order to directly impact student achievement by making strategic decisions, engaging the learners themselves, to determine what comes next for students' learning.

KEY MESSAGES

- The concept of Strategic Assessment Systems is built on the balanced assessment work previously developed by DPI. Strategic Assessment Systems can be explored in further detail through our [foundational documents](#).
- We are intentional about the use of the word “*strategic*” instead of “*balanced*” because:
 - It better encapsulates both the comprehensive and purposeful nature of the system that intentionally drives thoughtful, data-based decision making.
 - It counteracts the unintended assumptions that “balance” implies, wherein practitioners may expect to evenly proportion the use of formative, interim, and summative assessments. Rather, in a strategic assessment system, educators emphasize, prioritize, and rely on formative practices at the classroom level more than other types of assessment.
 - The distribution of the types of assessment is necessarily imbalanced. One perspective that can guide your thinking is to allocate your teacher/student assessment time so that approximately 90% is spent on formative practices, about 8% on interim measures, and about 2% on summative assessment.
- Formative feedback plays a critical and primary role in driving the teaching and learning process. Because formative practices are intended to provide educators and students with data to immediately improve teaching and learning, emphasis is placed on formative practices and the cycle of improvement it supports.
- Strategic Assessment Systems require the identification of high quality assessments to produce the most effective and efficient information about students' readiness for college and career with the least amount of testing.
- In Strategic Assessment Systems, assessments are purposefully aligned and intentionally utilized to support data inquiry.
- *All information* on students is data, including quantitative, qualitative, and anecdotal.
- Not all data gleaned, especially those from formative practices, needs to be recorded or put in the grade book. Data gleaned from various assessments can be thought of like this:
 - Formative – no stakes; used in the moment to adjust instruction
 - Interim – low stakes; used after chunks of instruction
 - Summative – high stakes; used at the conclusion of instruction

 **KEY RESOURCES** 
[Strategic Assessment Systems](#)
[SAS Explained](#)

4) ESSENTIAL LEARNING

Essential learning embodies the critical skills, knowledge, and dispositions each student must acquire as a result of each course, grade level, and unit of instruction. Essential learning is at the core of deep instruction, as well as foundational to curriculum and assessment. In order to successfully integrate the essential learning throughout the cycle, educators need to know the following:

- What is the learning target, what does proficiency look like, and how it will be communicated to students?
- What open-ended, grade-level appropriate questions will prompt exploration, innovation, critical thinking, and deeper learning?

KEY MESSAGES

- Essential learning includes academic content standards, Literacy Standards for All Subjects, Standards for Mathematical Practice, behavioral expectations, etc.
- We emphasize clusters of standards, not a singular standard, that get at the integrated and essential learning necessary for student success.

5) FORMATIVE PRACTICES

Formative practices are teacher techniques designed to quickly inform instruction by providing specific and immediate feedback through daily, ongoing instructional strategies. These practices are student- and classroom-centered, embedded into the instructional fabric of the classroom, and answer “what comes next for student learning?”

KEY MESSAGES

- Formative practices are used by teachers and students during the instructional cycle to provide specific, actionable, and immediate feedback to both teacher and student.
 - When used deliberately and linked to the essential learning targets, formative practices play a critical role in driving the teaching and learning process.
 - When embedded into the instructional cycle, formative practices have the power to transform student learning and improve student outcomes.
- Formative practices are teacher techniques, not a test that can be purchased or pulled off a shelf. By definition, these practices change continuously based on student needs, although educators likely have a core set of tools and techniques upon which they rely to support these formative practices. If a vendor is selling a formative product, be cautious. A practice or technique can't be purchased, but they can be developed and refined. These teacher techniques are embedded into an educator's professional practice and are used to engage students.
- The process of using formative practices involves four critical components:
 1. Gain a deep understanding of learning goals
 2. Envision proficiency in each standard
 3. Designed by teachers
 4. Use feedback to adjust instruction



- Formative practices and formative assessment are sometimes used interchangeably. However, the use of the phrase “formative practices” rather than “formative assessments” is intentional so as to highlight the ongoing nature of formative feedback, as opposed to test events. The

immediate use of formative data with the feedback loop driving instructional adjustments is emphasized, and this assessment adage applies: *if it has a score, it's probably not formative.*

- Formative data/information should not be used in a summative fashion; no scores derived from formative practices should be used for high stakes decision-making.
- Educators should spend the majority of assessment time on formative practices. One perspective that can guide your thinking is to allocate your teacher/student assessment time so that approximately 90% is spent on formative practices, about 8% on interim measures, and about 2% on summative assessment.

6) INTERIM ASSESSMENTS

Interim assessments are designed to benchmark and monitor student progress by providing multiple data points across time, through periodic diagnostic and common assessments. They are typically grade-level and school-centered, and answer “what progress are our students making?”

KEY MESSAGES

- This type of assessment is intentionally referred to as interim rather than benchmark or diagnostic. Although interim assessments may serve the purpose of benchmarking progress or diagnosing instructional gaps, the term “interim” more appropriately captures the purpose and sequencing of this assessment within a strategic system.
- Interim assessments can be helpful in an SLO process, or within a multi-level system of support (RtI), but DPI does not require any particular test to be used in either.
- Data from interim assessments can inform pacing, groupings, interventions, and instructional plans.
- Since data from interim assessments can be aggregated, it can be used to reveal trends, identify patterns, and help educators monitor the progress and performance of student groups at various levels, including grade, subgroup, school, district, etc.

7) SUMMATIVE ASSESSMENTS

Summative assessments are designed to evaluate learning by providing cumulative snapshots, usually through standardized assessments. Summative assessments are typically school-, district-, or state-centered, and answer the question, “Are our students meeting the standards?”

KEY MESSAGES

- Summative assessments include more than standardized tests.
- Strategic Assessment Systems emphasize the purposeful use of summative data (EOY grades, portfolios, projects, etc.), rather than administration of standardized tests alone.
- Not all standardized tests are summative; some are interim in nature.
- Standardized testing (like the annual state assessments) can help illuminate areas of strength and gaps in curriculum, instruction, especially for student subgroups.
- Within a Strategic Assessment System, we work to de-emphasize the annual state test. While it reports on student learning and is used in accountability, it doesn’t impact student learning. Summative testing should be properly positioned as a small portion of the overall testing landscape; and not take up more than 2% of instructional time in a school year.

KEY RESOURCES

[Formative Assessment](#)
[Interim Assessment](#)
[Summative Assessment](#)

8) DATA INQUIRY

Data inquiry, in its most basic form, is a process by which a learning organization engages in collaborative data analysis in order to examine strengths, areas for growth, and gaps. Through a cyclical process involving questioning, investigating, clarifying, and hypothesizing, it promotes critical reflection, ideally with a growth-mindset, that drives action planning and ongoing analysis. Data inquiry is a key component of the continuous improvement process.

9) CONTINUOUS IMPROVEMENT

Data inquiry, in its most basic form, is a process by which a learning organization engages in collaborative data analysis in order to examine strengths, areas for growth, and gaps. Through a cyclical process involving questioning, investigating, clarifying, and hypothesizing, it promotes critical reflection, ideally with a growth-mindset, that drives action planning and ongoing analysis. Data inquiry is a key component of the continuous improvement process.

KEY MESSAGES

- Within DPI, the Coordinated Continuous Improvement Process is a cross-agency effort to define the elements needed for high-quality, meaningful and sustainable school improvement.
- This school- or district-led process is aligned with implementation science, is stage-based, and cross-pollinates best practices from a variety of relevant fields, including school improvement planning, special education, and cultural responsiveness.
- While prioritizing the improvement process for identified schools and districts through federal and state compliance and monitoring purposes, the elements, tools, and process are essential to and can be applied to any school's or district's improvement process.

10) WISCONSIN INFORMATION SYSTEM for EDUCATION (WISE)

WISE is comprised of multiple tools that support a variety of data needs that meet required state and federal reporting mandates, and a dashboard system that securely reports education data to districts and the public. The WISE suite of tools is used by Wisconsin educators, researchers, the public, and DPI staff. WISE provides a data-based foundation for education stakeholders to understand, promote, and improve educational outcomes for all Wisconsin students.

The WISE Suite of Tools includes the following:

<i>Data collection:</i> WISEdata allows school districts, charter schools, and private schools to submit data from student information systems to DPI in an efficient and streamlined process.	<i>Data reporting:</i> WISEdash provides education data about Wisconsin schools to districts, schools, parents, researchers, media, and other community members.
<i>Data inquiry:</i> WISEExplore provides a consistent data inquiry process for improving student achievement in Wisconsin.	<i>Instructional & professional learning resources:</i> WISElearn is a portal consolidating available resources for Wisconsin Educators to use in the classroom and for professional development.

