

Improving Local Assessment Practices for Students With Disabilities

Sheryl S. Lazarus, Ph.D.

National Center on Educational Outcomes, University of Minnesota

Susan M. Brookhart, Ph.D.

Duquesne University, Pennsylvania

Gail Ghere, Ph.D.

National Center on Educational Outcomes, University of Minnesota

Kristin K. Liu, Ph.D.

National Center on Educational Outcomes, University of Minnesota

- **A comprehensive assessment system, including data from local assessments (e.g., formative assessment practices, interim assessments) can help inform instructional decisions for students with disabilities, including students with significant cognitive disabilities and English learners with disabilities.**
- **Pre-assessment to plan instruction can help guide the instructional planning process and improve the learning experience for students with disabilities, as well as for other students.**
- **Interim assessments can support instructional decision making, but they also have the potential to negatively impact individual students and groups of students if not selected and used with caution.**
- **Special education leaders need to be knowledgeable about selecting and implementing local assessments to help ensure that the resulting data are useful and valid for the intended purposes.**

Key words: Formative Assessment Practices, Interim Assessment, Local Assessments, Pre-Assessment.

District and school leaders play key roles in establishing local assessment practices that are inclusive of all students including students with disabilities and English learners with disabilities. Achieving this means creating a culture of assessment literacy that values and understands how to use data to inform instructional decision making. Webb (2002) defined *assessment literacy* as: the knowledge of 1) the means for assessing what students know and can do, 2) the interpretation of the results from these assessments, and 3) application of assessment results to improve student learning and program effectiveness.

Leaders with a deep knowledge of special education and students with disabilities should be included in district and school discussions of local assessments to help ensure that students with disabilities are included appropriately (Thurlow et al., 2015). Special education leaders have unique knowledge and perspectives that can connect curriculum and assessment with high-quality teaching and learning practices for all students,

including students with disabilities and English learners with disabilities. It is important to understand students' individualized assessment needs, as well as understand the policies and practices that ensure that all students, including students with disabilities and English learners with disabilities, are able to participate in assessments. When student groups, such as students with significant cognitive disabilities or English learners with disabilities, are not included in assessments, discussion about the learning of these students may be omitted from discussions about data.

A common understanding of the role of assessment should be anchored in a shared vision of high-quality instruction and learning for all students. Administrators and general educators should have a deep knowledge of the academic content standards and the desired outcomes for students. Concurrently, special educators need knowledge about grade-level standards, the essential learning for all students, and ways to design instruction to remove barriers to learning (Vandercook et al., 2021). This includes

having the capacity to engage with others in making decisions about the quality, value, and utility of assessment tools and practices that are used to inform students' learning and program improvement (Telfer, 2011).

Without a clear vision of why students should be engaged in assessments and what the evidence of student learning will be used for, there is a risk of misusing and misinterpreting data about student learning, as well as a risk of over-testing. Leaders need to understand types of assessments, their purposes, and how to interpret and use data from each assessment.

The purpose of this article is to provide an overview of how students with disabilities, including students with significant cognitive disabilities and English learners with disabilities, can be included in local assessments used for instructional and programmatic decision making—that is, for formative purposes. This article focuses on formative assessment practices, including pre-assessment to plan instruction, and interim assessments for students with disabilities. We do not address other types of local assessments (e.g., unit tests, rubrics to measure academic achievement, and other more summative local assessments) here, though the same general principles apply to them.

Data-Driven Decision Making

Valid and meaningful data about student learning are vital for making instructional decisions that lead to improved outcomes. This involves having an intentional purpose for collecting data, considering alternative ways students demonstrate their learning, and using appropriate methods and measures for collecting the evidence. Leaders can then create conditions where compiled data are used to support instruction and programming. Merely having the right practices and measures and producing relevant data are not enough to ensure that assessment supports will improve learning outcomes. Educators should understand the data, have time to make sense of it, and learn how to use the data to make appropriate instructional decisions. There also must be plans for ensuring that assessments are accessible and that students with disabilities and English learners with disabilities are participating in them. Leaders can support this with professional development on how to include all students in local assessments.

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Many teachers find it difficult to decide on specific instructional changes connected directly with inferences from data (Hamilton et al., 2009; Young & Kim, 2010), including instructional changes for students with individualized education programs (IEPs) (Fuchs & Fuchs, 2005), and then taking appropriate action. To make changes in instruction, teachers often rely on information from classroom assessment results and student work (Farrell & Marsh, 2016), which can be more diagnostic and more closely tied to classroom-level learning goals and instruction than state test or interim data that are more distanced from the classroom.

Another effective practice is removing barriers to learning, which is particularly important for students with significant cognitive disabilities and students with disabilities who are English learners. Using the Universal Design for Learning (UDL) framework for instruction can remove barriers for student learning (TIES Center, 2020). Formative assessment practices can be made accessible for many students through the use of the principles of UDL, and accessibility features and accommodations can be used to provide accessibility for some students (Brookhart & Lazarus, 2017).

Formative Assessment Practices for Developing Self-Directed Learners

Formative assessment practices include “all those activities undertaken by teachers—and by their students assessing themselves—that provide information to be used as feedback to modify the teaching and learning activities” (Black & Wiliam, 1998, p. 82). The Council of Chief State School Officers' (CCSSO's) Formative Assessment for Students and Teachers (FAST) collaborative similarly defined these practices as:

[P]lanned, ongoing process[es] used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary outcomes and support students to become self-directed learners. (FAST, 2018, p. 2)

Figure 1. Formative assessment learning cycle.
 Note. Source: Brookhart (2020). Reprinted with permission.



Formative assessment practices provide data that are immediately actionable and are a powerful lever that can increase the learning of all students, including students with disabilities and English learners with disabilities. Teachers and students engage in formative assessment practices not only to help students meet their learning goals but to assist them in becoming self-directed learners. As evidence is acted on and learning goals met, new learning goals and success criteria are developed, and the ongoing cycle begins again. The cycle is based on three questions that guide teachers and students and move learning forward (see *Figure 1*).

Strong arguments have been made for the use of formative assessment processes with student with disabilities (Butler, 2003; Butler & Schnellert, 2015; Butler et al., 2013; Madison-Harris, Muoneke, & Times, 2012). Butler and Schnellert (2015) presented the argument this way. Students who are effective at the self-regulation of learning are more likely to learn in school and succeed out of school. For example, students with learning disabilities often struggle with the basic and higher-order processing needed for effective use of self-regulation of learning. Formative assessment practices help all students develop skills in the self-regulation of learning by clarifying learning goals and giving students tools and feedback to help them aim for those goals.

English learners with disabilities also need to develop English proficiency and formative assessment can help gauge the linguistic demands of a lesson as well as student’s language learning progress. A survey of secondary special education teachers who teach reading to students with learning disabilities found that almost 60% reported using ongoing formative assessment practices and this strategy ranked third only to explicit vocabulary and

comprehension instruction (Leko et al., 2019). A meta-analysis of strategies for mathematics instruction for students with learning disabilities (Gersten et al., 2009) found that providing ongoing formative assessment processes as feedback to teachers on students’ mathematics performance and providing feedback to students were both significant contributors to student achievement in mathematics.

Formative assessment is also part of effective instruction for students with significant cognitive disabilities. It assists in determining whether and what additional support is needed beyond multi-tiered systems of support (MTSS) Tier 1 instruction (i.e., the core curriculum) (Cox et al., 2020; Thurlow et al., 2020). Examples for formative assessment practices for all students, including students with significant needs, include direct observation to understand how the student approaches a problem and the use of curriculum-based measures to determine a student’s knowledge and skills related to a specific curricular area.

In short, formative assessment practices help create the student-centered, supportive learning environments in which students with disabilities and English learners with disabilities thrive. Further, they can give teachers the information they need to scaffold the development of metacognition, motivation, and strategic action among students who may struggle with these aspects of learning. At the same time, formative assessment practices can help students regulate their learning processes.

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Leadership for Inclusive Formative Assessment Practices

Leaders can take several steps to support all educators in developing formative assessment practices. First, they can consistently communicate a vision for assessment that includes each and every student. This vision focuses on accessing and learning grade-level standards, using data from formative assessment practices to improve learning, and identifying gaps in knowledge and skills for

more intensive instruction in addition to core instruction. The vision includes communicating why formative assessment practices matter and how they can improve learning. It also includes creating a clear picture of how the classroom will be different when students are engaged in effective formative assessment practices, and the shifts in teacher and student roles.

Second, leaders can ensure that there is joint professional development that includes general educators, special educators, and teachers of English learners about the effective use of formative assessment practices connected to the general education curriculum. As part of professional development, there should be discussions about what is working for most students, what barriers are evident for some learners, and what adaptations are needed to gather data about each student (TIES Center, 2020). All professional development sessions on assessment should be co-taught by representatives of curriculum and instruction, special education, and English learner departments. Modeling collaboration around this key topic and its importance in instruction sends a powerful message to all staff.

Third, leaders can encourage other district and school leaders to include time for general educators, teachers of English learners, and special educators to collaborate. For example, principals can ensure that specialist teachers are part of grade level and department curriculum planning meetings or professional learning communities. After expectations and schedules are set for instructional collaboration, leaders can support all educators to use discussion protocols for meaningfully considering all students' data, looking at work samples to determine student learning successes and challenges, and planning next instructional moves. A common challenge is when specialist teachers are not able to be in-person at the collaborative planning meetings for multiple teams (for example, the special education teacher is not able attend the weekly planning meetings for three different grade levels because of schedule conflicts). If the teams always use online shared documents to plan, coordinate and align instruction and any team member is unable attend in-person, then they can log on before or after the meeting to add their feedback and ask or respond to questions.

Finally, leaders should ensure that special education and English learner representatives are at the table when discussing all portions of a

comprehensive assessment system. Doing so will help all participants to understand the issues and decisions that are being made, to consider how to provide accessibility for all students, and to build collaborative discussions across the levels of the system that will deepen mutual understanding about the importance of including all students in all facets of assessment. Similar representation in discussions is also important for all curriculum adoptions and the components of formative assessment that may be part of adoptions.

Pre-Assessment to Plan Instruction

One use of formative assessment practices is as pre-assessment to plan the differentiated instruction needed in inclusive classrooms. Leaders have an important role to play in helping educators to develop the knowledge and skills to use formative assessment practices as pre-assessment.

Pre-assessment to plan instruction (hereafter, pre-assessment) is “a type of formative assessment that occurs before instruction to support instructional planning and inform students about upcoming learning” (Brookhart & Lazarus, 2020, p. 2). Effective pre-assessment includes the assessment processes and tools that teachers use to determine students' knowledge, skills, attitudes, or dispositions before planning a unit or sequence of lessons. It can also tell a teacher whether an English learner with a disability has the English skills needed to engage with the lesson materials or whether the teacher needs to pre-teach certain English skills as well. Effective pre-assessment also serves to alert students to what they are about to study, one type of what Carless (2007) calls “pre-emptive formative assessment” (p. 171). Pre-assessment can give students feedback on where to focus their attention before they begin studying and learning their lessons (Guskey, 2018; Hockett & Doubet, 2013/2014; Turner, 2014).

Pre-assessment addresses students' standing on intended learning goals (Brookhart & Nitko, 2019; Gong et al., 1992; Guskey, 2018), which should be related directly to state standards and the school's curriculum. For a given learning goal, pre-assessment seeks information about one or more of the following: students' prior school experiences, interest or attitudes, personal connections, general knowledge or common knowledge (e.g., from home, TV, stories),

prerequisite knowledge or skills, knowledge of key terms, existing schema or knowledge of centrally important concepts, and skills or procedural knowledge.

Teachers can use pre-assessment to ascertain prerequisite knowledge and skills, to monitor progress, or as a misconception check. They can also use it as an advance organizer for a unit or sequence of lessons to focus student attention on upcoming learning targets and to set expectations. Pre-assessment can be at the individual or group level, depending on the degree of detail required for planning.

Educators give arguments both for and against using pre-assessment to plan instruction. On the positive side, information about students' knowledge, skills, and dispositions helps teachers target instruction more precisely for students' needs (Hockett & Doubet, 2013/2014). Pre-assessment information supports differentiated instruction and the use of flexible grouping (Ernest, Heckaman, Thompson, Hull, & Carter, 2011; Moon, 2005; Pendergrass, 2013/2014). Arguments against pre-assessment caution that unless carefully designed to show what students know and can do instead of what they do not know, pre-assessment can waste instructional time; one could predict that most students will not know content that has not yet been taught. Further, a conventional pre-test may mean most students begin a unit or sequence of lessons with a failure experience, which does not set them up well for success during instruction (Guskey & McTighe, 2016). Both arguments have merit. However, the argument against pre-assessment is really an argument against ineffective practices that do not provide teachers useful information and do not support students in their learning. Teachers should, of course, avoid creating failure experiences for students. The argument that well-crafted pre-assessment is useful, and even necessary, for differentiating instruction is more persuasive.

Taub, McCord, and Ryndak (2017) discuss the importance of including formative assessment practices and monitoring student progress to help students with significant cognitive disabilities access the curriculum. They concluded that "the use of those measures inform *planned* and *enacted* curriculum, resulting in more opportunities for students with [extensive support needs] to learn" (p. 133). Students with disabilities thrive in inclusive educational settings where general educators and special

educators collaboratively plan instruction. They thrive in classrooms where instruction meets their learning needs. The use of pre-assessment can play a key part in creating quality learning environments.

Three studies (Ernest et al., 2011; Frey & Fisher, 2013; Koedinger, McLaughlin, & Heffernan 2010) investigated the use of pre-assessment specifically, either alone or in concert with other formative assessment processes, in specific grade levels and content areas, with students with disabilities. The findings from all three were positive, including increased learning for students with disabilities and increased communication between regular and special education teachers.

In summary, pre-assessment does have a role in instruction for students with disabilities. Pre-assessment to plan instruction, if used carefully, can support teachers, especially with differentiating instruction, and help students with the self-regulation of their learning. All students, especially students with disabilities, benefit from differentiated instruction and self-regulation of learning. Empirical studies have shown that formative assessment practices, especially practices that include diagnostic information for teacher planning, benefits students with disabilities as much as, or in some studies more, than students without disabilities.

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Five Step Process for Using Pre-Assessment When Planning Instruction

Leaders can equip educators with understandings to support the systematic, effective use of pre-assessment that is necessary for differentiated instruction in inclusive classrooms. Supporting professional development and resources about the five steps in pre-assessment practices can help leaders provide the support educators need to effectively use these practices.

Step 1: Set the Learning Goal. Effective pre-assessment begins with teachers knowing exactly what they are trying to teach (Gong et al., 1992; Guskey, 2018) and what students should be intending to learn. The learning goal or goals for an instructional unit or sequence of lessons typically come from state standards and school curriculum documents. Learning goals can be categorized according to the kind of learning they describe. Knowing these categories will help educators decide what assessment methods will be most useful. A four-category system (Chappuis & Stiggins, 2020) for this purpose includes:

- Knowledge learning goals: Specify facts, concepts, or procedures students will learn.
- Reasoning learning goals: Specify the thought processes students will apply.
- Performance skill learning goals: Specify physical performances students will learn.
- Product learning goals: Specify the objects or things students will be able to produce.

A unit's learning goals often are more than one type. For example, a class is beginning a unit in which it will develop simple models of plant and animal cells and use them to explain how cells support life. Students will learn some facts and concepts about animal and plant cells (knowledge goals) and apply these concepts as they think about how plants and animals live (reasoning goals). They will also make models (product goal).

Step 2: Identify Pre-Assessment Information Needs. Leaders should help teachers realize that it is not necessary, or even helpful, to pre-assess everything that could possibly be relevant to a learning goal. Teachers should decide what information would be the most useful for making instructional decisions, especially for differentiation, during initial planning. This will be the most efficient and effective use of pre-assessment time. There will still be opportunities for ongoing formative assessment during teaching to gather additional information. For example, suppose the next unit will have several new vocabulary words and essential concepts. Knowledge about individual students and what they already know about the most important of those terms could be very helpful in selecting the pre-assessment method and differentiating instruction. The identification and implementation of pre-assessments can involve both general and special

education teachers. They can collaboratively plan differentiated, small group work to build on the vocabulary students already know, address misconceptions students have, and emphasize terms with which students are least familiar. Therefore, the teachers might decide to pre-assess knowledge of key terms instead of all the other things that could be pre-assessed for the unit. For creating small flexible groups, this information will also be needed to identify when to group students with similar learning needs and when to keep the whole class together with its heterogeneous mix of students.

Step 3: Design the Pre-Assessment. Leaders can help teachers realize that creating or selecting a pre-assessment requires considering whether it can effectively elicit the information identified as important for immediate and upcoming planning (i.e., information identified in Step 2).

Table 1 gives examples of 10 pre-assessment tools that can be used with all students, including students with disabilities (Brookhart & Lazarus, 2020). Each of the tools in this list is based on a question or task that the educator sets for students and is evaluated with criteria designed to match information needs. The table is not an exhaustive list; rather, it describes the most common and most versatile pre-assessment tools. The "primary assessment purpose" column shows the kind of information each tool can best assess, and the "level of information" column shows whether the tool yields information at the individual or group (class or small group) level.

For example, Tool 3 is a small group task, typically two to four students. Teachers can employ content-related performance tasks of various kinds, such as asking students to solve a problem or to create something. Tool 3 can also be combined with another strategy. In particular, Venn diagrams, concept maps, and K-W-L charts (which show *what I Know*, *what I Want to learn*, *what I Learned*) make effective small group tasks. The conversation students have as they are completing these visual organizers is often more interesting and informative—to both students and teachers—than the finished product. If a small group task is assigned and the finished tasks are collected, the teacher will have information at the group level. If teachers observe individual students as they are working, teachers will have some individual-level information. Several of the strategies can be done individually or in groups; for example, individuals can make their own concept maps or small groups can each make a group concept map.

Table 1: Tools for pre-assessment

| Tool | Primary assessment purpose | Level of information |
|--|---|-----------------------------|
| 1. Oral questioning or Introductory discussion | <ul style="list-style-type: none"> • Prerequisite knowledge • Current understanding of key concepts • Previous school experiences with the content • Current interest • Personal connections | Group |
| 2. Brainstorming session | <ul style="list-style-type: none"> • Prerequisite knowledge • Current understanding of key concepts | Group |
| 3. Small-group task | <ul style="list-style-type: none"> • Prerequisite knowledge • Current understanding of key concepts • Current interest • Problem-solving ability | Individual Group |
| 4. Journal or quick-write prompts | <ul style="list-style-type: none"> • Prerequisite knowledge • Current understanding of key concepts • Previous school experiences with the content • Current interest • Personal connections | Individual |
| 5. Whiteboard prompts | <ul style="list-style-type: none"> • Prerequisite knowledge • Problem-solving ability | Individual |
| 6. Single multiple-choice question with distractors based on common misconceptions | <ul style="list-style-type: none"> • Prerequisite knowledge • Current understanding of key concepts | Individual Group |
| 7. Venn diagram | <ul style="list-style-type: none"> • Prerequisite knowledge • Current understanding of key concepts | Individual Group |
| 8. Concept map | <ul style="list-style-type: none"> • Prerequisite knowledge of one key concept • Current understanding of one key concept | Individual Group |
| 9. K-W-L chart | <ul style="list-style-type: none"> • Prerequisite knowledge • Current understanding of key concepts | Individual Group |
| 10. Pre-assessment quiz | <ul style="list-style-type: none"> • Prerequisite knowledge | Individual |

Note. Source: Adapted from Brookhart & Lazarus (2020). Adapted with permission.

Before a pre-assessment strategy is selected, the educators should decide whether information is needed that pertains to a group or individuals. For example, if planning an upcoming math unit on multi-step problems, it may be helpful to pre-assess students’ problem identification and strategy use for single-step problems. If the pre-assessment was a small group task where groups were assigned to solve a problem together, information will be at the group level (e.g., “Most groups could identify problems that called for addition or subtraction easily, but had more trouble with problems that called for multiplication or division”). If the pre-assessment was a whiteboard prompt, it could be used to make inferences about individuals (e.g., “Sanjay, Alicia, and Alondra can identify and solve single-step problems that use any operation; Portia and Ernest can identify

and solve single-step problems that use addition and subtraction more easily than multiplication and division”). Special educators can identify accessibility needs, and identify ways to make pre-assessment accessible to all.

Every pre-assessment method, from classroom discussions to concept maps to quizzes, asks students to respond to a question or task that is created or selected to match the information identified in Step 2. The quality of those questions or tasks is critical for obtaining desired information. Evaluating students’ responses based on criteria that match information needs is critical for effective pre-assessment.

Pre-assessment questions or tasks and evaluation criteria for students with disabilities are most effective if they have the following characteristics (Brookhart & Lazarus, 2020):

- Align with the standards or learning goals from the upcoming unit or sequence of lessons.
- Preview the content students will be focusing on (pique interest, act as an advance organizer, activate a schema).
- Elicit a response that makes student thinking visible.
- Avoid extraneous barriers (e.g., language, reading level) and use multiple modalities.
- Lead to information about student strengths as well as needs.
- Reference some type of learning progress map that is useful for instructional planning.

Leaders can support the need for general educators and special educators to communicate and collaborate during the design of pre-assessment to ensure that the pre-assessment will be accessible to all students in the class. Questions to consider include:

- How can the principles of universal design be used when developing this pre-assessment so that it is more accessible to a broad group of students?
- Do some students need accessibility features or accommodations to access this pre-assessment? If so, what accessibility will be needed by specific students?

Leaders can help ensure that both special and general education teachers consider the information needs identified in Step 2 and decide which tool in *Table 1*, or another developed tool, matches best with those information needs and with their students' abilities and interests. Then, they will be able to create the pre-assessment tasks and evaluation criteria.

Step 4: Administer the Pre-Assessment and Interpret Results. Step 4 is about gathering data and interpreting those data. Leaders can reinforce the importance of educators making sure students have clear directions for their pre-assessment and the time, space, and materials they need to accomplish it. It is important to ensure that students have their needed accessibility features and accommodations so they can meaningfully access the pre-assessments. If the pre-assessment is group-based, the task must be appropriate for everyone in the group so that all students can contribute. General, special education, and English learner teachers should be encouraged and supported as they work together to create appropriate tasks.

Students' responses should be observed or scored. For group tasks, both general and special

education teachers might observe students' discussions because they can be more informative than the group's final product (Furtak et al., 2016; Brookhart & Lazarus, 2020), and each would hone in on different aspects. They can then have a brief conversation about what they saw following the class. Inferences made when interpreting results should be at the appropriate level (individual or group) for the evidence the pre-assessment has produced. Whenever possible, interpretation of pre-assessment results should focus on evidence about student thinking rather than correctness.

Step 5: Plan Instruction. Pre-assessment data can be used to plan instruction for the unit or sequence of lessons. These data may suggest adjustments in one or more of the following aspects of unit and lesson planning:

- Background knowledge to pre-teach, review, or reteach and whether review or reteaching should be whole-class or differentiated (e.g., in learning stations).
- Topics or concepts to emphasize or de-emphasize, or topics to expand and extend, in terms of either instructional time spent or depth of thinking in instructional activities, for both whole-class and differentiated activities.
- Language structures, functions, or vocabulary that may need to be taught for students to be successful with a lesson (e.g., students need to know how to summarize a reading passage in their own words, students need to write an argument using transition words like first, next, then).
- Misconceptions to address, in whole-class or differentiated activities.
- Grouping decisions for small-group work, considering using groups that are heterogenous in student interest or background knowledge, and where peer supports can provide scaffolds for other students' learning. (Grouping decisions will be important for some students with disabilities, particularly students with significant cognitive disabilities. They also provide support for English learners with disabilities depending on their academic language needs.)
- Where to concentrate student participation, considering using more participatory instructional strategies in areas where students have misconceptions or lack background knowledge
- Writing questions for class discussion considering having students participate in facilitated class

discussion, where they must respond to each other, in areas where they need practice explaining their thinking.

These suggestions hold for instructional planning for all students but may be especially important for students with disabilities. Pre-assessment may uncover some missing background knowledge or skills that, if addressed, would allow the student with a disability to benefit more from upcoming instruction. Pre-assessment may also uncover interests or strengths to build on. When planning instructional activities, special education and general education teachers should collaboratively make sure to allow for multiple, flexible representations of the content and multiple, flexible means of expression for students. These universal design principles will maximize students' access to and benefit from instruction. Continued communication and collaboration between the general and special education teachers will support the development of instruction that is accessible to all students in the class.

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Research has documented that using pre-assessment to plan instruction is the step many teachers find most difficult. However, it is the step that makes the pre-assessment work in the first four steps worthwhile. The whole purpose of pre-assessment is to make possible more effective, targeted instruction. Leaders can emphasize this point in their professional development with educators.

Interim Assessments

Interim assessments are another type of local assessment. *Interim assessments* "refer to assessments that are administered several times during a school year to measure student progress. They may be commercially produced or developed by groups of states or other organizations" (Lazarus, Strunk, et al., 2021, p. 1), and may be common across classes or

schools. Perie et al. (2009) similarly defined interim assessments as:

Assessments administered during instruction to evaluate students' knowledge and skills relative to a specific set of academic goals in order to inform policymaker or educator decisions at the classroom, school, or district level. The specific interim assessment designs are driven by the purpose and intended uses, but the results of any interim assessment must be aggregable for reporting across students, occasions, or concepts. (p. 6).

Interim assessments are used to monitor students' academic progress toward long-term goals; assess curriculum, instructional strategies and pacing; inform school improvement planning; and sometimes to predict a student's end-of-year performance on the summative test. In recent years, as a result of school disruptions caused by COVID, there has also been interest in using interim assessments to measure learning loss (Lazarus, Hinkle et al., 2021; Lazarus, Strunk et al., 2021).

School and district leaders play key roles in ensuring that any interim assessments used are appropriate for the desired purpose. To help ensure that any interim assessments that are used will accurately measure what students with disabilities know and can do, it is vital that individuals with expertise in special education and the needs of students with disabilities are involved in the selection and implementation of any interim assessments that are used. Considerations include:

- **Clearly articulating the purpose of the interim assessment.** Some interim assessments may not be aligned to a state's grade-level academic content standards or English proficiency standards. If the intent is to determine whether students are learning grade-level academic content, the interim assessment needs be aligned to these standards. Data from interim assessments are sometimes used in ways that go beyond the purposes for which the assessment was designed, which risks inappropriate decisions (e.g., an interim assessment that is not aligned to grade-level standards is used to predict performance on the state summative assessment used for accountability). Leaders should insist that vendors provide evidence that any interim assessments selected are designed for the desired purpose and are technically adequate for that purpose (Lazarus, Hinkle et al., 2021). Having discussions with the

Table 2: AA-AAAS adaptations for levels of interim assessments

| Level | Brief description | Possible adaptation for interim AA-AAAS |
|-------------------------------------|---|--|
| Level 1. Summative Domain | A mini-summative assessment with content sampled from grade (e.g., ELA, math, science). Approximates the summative alternate assessment with sample items for each content area (e.g., ELA, math, science). | Use context of a real-life activity such as going to the museum. Provide items to comprehend informational text, do math problem related to one exhibit, and science concept embedded in another. |
| Level 2. Sub-Domain | Offers information about a large subdomain of content area such as reading or writing. | A literacy assessment in which short passages are read aloud with corresponding questions to sample a range of skills related to ELA content. May be structured such as a lesson in which student makes a variety of responses related to passage (e.g., finds a word, fills in sentence, completes graphic organizer). May include related informational and literary texts or mixed media. |
| Level 3. Reporting Category/Cluster | May focus on important learning goal, big idea of content, or set of related skills/standards. | Focuses on one category of standards such as informational text. Uses passages and series of questions similar to AA-AAAS, or one category of mathematics, such as geometry and use of one multi-step problem. Category selected based on some prioritization such as the most critical standards or those most at risk for poor achievement. |
| Level 4. Focal Skills/Standards | Measures performance on a narrow set of skills/standards. | Quick assessment of a high priority skill/standard such as comprehension of one read-aloud passage or solving one math problem. May include supports such as use of graphic organizer (e.g., for story elements) or pictorial task analysis (e.g., for steps to solve math problem) to show progress toward mastery. |

Note. Source: Browder et al. (2021); reprinted with permission.

district's research and evaluation department about whether an assessment's technical adequacy is inclusive of students with disabilities and English learners is critical.

- **Ensuring access.** Federal laws require that all students with disabilities, including those with significant cognitive disabilities and English learners with disabilities, participate in all district-wide assessment administrations (see co-editors' introduction), yet many interim assessments have limited accessibility features and accommodations. The range and availability of accessibility features and accommodations should be considered when selecting an interim assessment because accessibility features and accommodations used by some students during instruction may not be available for many interim assessments (e.g., braille, large print, text-to-speech, bilingual electronic dictionaries). The lack of available accommodations can be particularly problematic for some students with sensory disabilities (Lazarus, Hinkle, et al., 2021).

There also must be an alternate interim assessment for all district-wide assessment

administrations for students with significant cognitive disabilities who are unable to participate in the general interim assessment even with accommodations. Currently most interim assessments do not have alternate assessments. Schools and districts should carefully consider assessment options for students who need alternate interim assessments based on alternate academic achievement assessments (AA-AAAS; Browder et al., 2021). Browder et al. identified several options, depending on how the data may be used (see *Table 2*).

- **Communicating data limitations or contextual factors.** Data limitations and relevant contextual factors must be clearly communicated to users. Data users (e.g., educators, parents, etc.) often are not aware of data limitations when using the data. Sometimes vendors provide visually appealing reports that fail to provide information about data limitations and appropriate uses of the data. Information about data limitation and contextual factors should be routinely included in all reports (Lazarus, Hinkle, et al., 2021).

Leadership for Inclusive Interim Assessments

Interim assessments are widely used, but their purpose is not always clearly articulated, and data from these assessments often have limitations when used for purposes other than those for which they were intended. Leaders need to use care to ensure that interim assessments are accessible to students with disabilities and that they validly measure what these students know and can do. Alternate assessment options need to be identified for district-wide administrations of interim assessments. Leaders need to understand why interim assessments are being administered, which ones are appropriate for the intended purpose, and how to minimize data limitations.

Leaders need to use care to ensure that interim assessments are accessible to students with disabilities and that they validly measure what these students know and can do.

Leaders should develop or review (and revise as needed) school and district accessibility and accommodations policies to ensure that there is clarity about which accessibility features and accommodations are allowed for interim assessments, and the processes and procedures for using them. For example, districts may have their own policies, which may or may not align with vendor recommendations or state policies.

Leaders should collaborate with others to ensure that there is appropriate use, interpretation, and reporting of interim assessment data. Providing information about the appropriate and inappropriate interpretations and uses of the reported data and data limitations will help build confidence in the score reports. Interpretation guides and other materials should be provided to help educators, parents, and other stakeholders understand the data using language appropriate for the intended audience.

Conclusion

District and school leaders have important roles and responsibilities in designing, implementing, and sustaining assessment systems that support instructional decision making. They must understand

the purposes of different types of local assessment tools and uses and how they can be used together to support improved instruction and learning. This includes ensuring that the assessments are accessible to all students.

Collaborative creation of a vision that values the learning of all students as well as the use of data for decision-making can support improved outcomes. But vision alone is not enough. Leaders need to provide professional development to ensure that educators learn how to use assessment processes and assessment data to inform instructional and programmatic decisions.

References

- Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80, 139–148. https://www.michigan.gov/documents/mde/Inside_The_Black_Box__Black_and_William_601104_7.pdf
- Brookhart, S. (2020, May). *Five formative assessment strategies to improve distance learning outcomes for students with disabilities* (NCEO Brief #20). National Center on Educational Outcomes. <https://nceo.umn.edu/docs/OnlinePubs/NCEOBrief20.pdf>
- Brookhart, S., & Lazarus, S. (2017). *Formative assessment for students with disabilities*. Council of Chief State School Officers State Collaboratives on Assessing Special Education Students and Formative Assessment. https://ccsso.org/sites/default/files/2017-12/Formative_Assessment_for_Students_with_Disabilities.pdf
- Brookhart, S., & Lazarus, S.S. (2020, December). *Pre-assessment to plan instruction for students with disabilities during distance learning* (NCEO Brief #21). National Center on Educational Outcomes. <https://nceo.umn.edu/docs/OnlinePubs/NCEOBrief21.pdf>
- Browder, D.M., Lazarus, S.S., & Thurlow, M.L. (2021). *Alternate interim assessments for students with the most significant cognitive disabilities* (NCEO Brief #23). National Center on Educational Outcomes. <https://nceo.umn.edu/docs/OnlinePubs/NCEOBrief23.pdf>
- Butler, D.L. (2003). Structuring instruction to promote self-regulated learning by adolescents and adults with learning disabilities. *Exceptionality*, 11(1), 39–60. https://doi.org/10.1207/S15327035EX1101_4
- Butler, D.L., & Schnellert, L. (2015). Success for students with learning disabilities: What does self-regulation have to do with it? In T. Cleary (Ed.), *Self-regulated learning interventions with at-risk youth: Enhancing adaptability, performance, and well-being* (pp. 89–112). APA Press.

- Butler, D.L., Schnellert, L., & Cartier, S.C. (2013). Layers of self- and co-regulation: Teachers' co-regulating learning and practice to foster students' self-regulated learning through reading. *Education Research International*, 2013(1), Article ID 845694.
- Carless, D. (2007). Conceptualizing pre-emptive formative assessment. *Assessment in Education: Principles, Policy & Practice*, 14(2), 171–184. <https://doi.org/10.1080/09695940701478412>
- Chappuis, J., & Stiggins, R., (2020). *Classroom assessment for student learning: Doing it right—Using it well* (3rd ed.). Hoboken, NJ: Pearson.
- Cox, S., Root, J., & McConomy, A. (2020). Using data to design and evaluate math instruction. In E. Bouck, J. Root, & B. Jimenez (Eds.), *Research-based mathematics interventions* (1st ed., pp. 30–75). Council for Exceptional Children, Division on Autism and Developmental Disabilities.
- Ernest, J.M., Heckaman, K.A., Thompson, S.E., Hull, K.M., & Carter, S.W. (2011). Increasing the teaching efficacy of a beginning special education teacher using differentiated instruction: A case study. *International Journal of Special Education*, 26(1), 191–201.
- Farrell, C.C., & Marsh, J.A. (2016). Metrics matter: How properties and perceptions of data shape teachers' instructional responses. *Educational Administration Quarterly*, 52(3), 423–462.
- Formative Assessment for Students and Teachers (FAST). (2018). *Revising the definition of formative assessment*. Council of Chief State School Officers (CCSSO). <https://www.ccsso.org/sites/default/files/2018-06/Revising%20the%20Definition%20of%20Formative%20Assessment.pdf>
- Frey, N., & Fisher, D. (2013). A formative assessment system for writing improvement. *The English Journal*, 103(1), 66–71.
- Furtak, E.M., Kiemer, K., Circi, R.K., Swanson, R., de León, V., Morrison, D., & Heredia, S.C. (2016). Teachers' formative assessment abilities and their relationship to student learning: Findings from a four-year intervention study. *Instructional Science*, 44(3), 267–291. <https://doi.org/10.1007/s11251-016-9371-3>
- Gersten, R., Chard, D.J., Jayanthi, M., Baker, S.K., Morphy, P., & Flojo, J. (2009). Mathematics instruction for students with learning disabilities: A meta-analysis of instructional components. *Review of Educational Research*, 79(3), 1202–1242. <https://doi.org/10.3102/0034654309334431>
- Gong, B., Venezky, R., & Mioduser, D. (1992). Instructional assessments: Lever for systemic changes in science education classrooms. *Journal of Science Education and Technology*, 1(3), 157–176. <https://doi.org/10.1007/BF00701361>
- Guskey, T.R. (2018). Does pre-assessment work? *Educational Leadership*, 75(5), 52–57.
- Guskey, T.R., & McTighe, J. (2016). Pre-assessment: Promises and cautions. *Educational Leadership*, 73(7), 38–43.
- Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Hockett, J.A., & Doubet, K.J. (2013/2014). Turning on the lights: What pre-assessments can do. *Educational Leadership*, 71(4), 50–54.
- Koedinger, K.R., McLaughlin, E.A., & Heffernan, N.T. (2010). A quasi-experimental evaluation of an on-line formative assessment and tutoring system. *Journal of Educational Computing Research*, 43(4), 489–510. <https://doi.org/10.2190/EC.43.4.d>
- Lazarus, S.S., Hinkle, A.R., Liu, K.K., Thurlow, M.L., & Ressa, V.A. (2021). *Using interim assessments to appropriately measure what students with disabilities know and can do: Advisory panel takeaways and NCEO recommendations* (NCEO Report 427). National Center on Educational Outcomes. <https://nceo.umn.edu/docs/OnlinePubs/NCEOReport427.pdf>
- Lazarus, S.S., Strunk, K., Hinkle, A.H., & Liu, K.K. (2021). *Proceedings of the NCEO interim assessment convening: Measuring what students with disabilities know and can do using interim assessments*. National Center on Educational Outcomes. <https://nceo.umn.edu/docs/OnlinePubs/NCEOInterimAssessmentConvening2021.pdf>
- Leko, M.M., Alzahrani, T., & Handy, T. (2019). Literacy instruction for adolescents with learning disabilities: Examining teacher practice and preparation. *Learning Disabilities: A Contemporary Journal*, 17(1), 117–138.
- Madison-Harris, R., Muoneke, A., & Times, C. (2012, January). *Using formative assessment to improve student achievement in the core content areas*. Southeast Comprehensive Center at SEDL.
- Moon, T.R. (2005). The role of assessment in differentiation. *Theory into Practice*, 44, 226–233. https://doi.org/10.1207/s15430421tip4403_7
- Pendergrass, E. (2013/2014). Differentiation: It starts with pre-assessment. *Educational Leadership*, 71(4). http://www.ascd.org/publications/educational_leadership/dec13/vol71/num04/Differentiation@_It_Starts_with_Pre-Assessment.aspx
- Perie, M., Marion, S., & Gong, B. (2009). Moving toward a comprehensive assessment system: A framework for considering interim assessments. *Educational Measurement: Issues and Practice*, 28(3), 5–13. <https://doi.org/10.1111/j.1745-3992.2009.00149.x>
- Stecker, P.M., Fuchs, L.S., & Fuchs, D. (2005). Using curriculum-based measurement to improve student

achievement: Review of research. *Psychology in the Schools*, 42, 795–819.

Taub, D., McCord, J., & Ryndak, D. (2017). Opportunities to learn for students with extensive support needs: A context of research-supported practices for all in general education classes. *The Journal of Special Education*, 51(3), 127–137.

Telfer, D.M. (2011). *Moving your numbers: Five districts share how they used assessment and accountability to increase performance for students with disabilities as part of district-wide improvement*. National Center on Educational Outcomes.

Thurlow, M.L., Ghere, G., Lazarus, S.S., & Liu, K.K. (2020). *MTSS for all: Including students with the most significant cognitive disabilities*. National Center on Educational Outcomes/TIES Center.

Thurlow, M., Lazarus, S., & Johnson, D. (2015). *Student assessment inventory for school districts: Considerations for special education assessment systems*. Achieve.

TIES Center. (2020). *TIES lessons for all: The 5-15-45 tool*. Author. <https://publications.ici.umn.edu/ties/5-15-45/overview>

Turner, S.L. (2014). Creating an assessment-centered classroom: Five essential assessment strategies to support middle grades student learning and achievement. *Middle School Journal*, 45(5), 3–16. <https://doi.org/10.1080/00940771.2014.11461895>

Vandercook, T., Bowman, J., Ghere, G., Martin, C., Leon-Guerrero, R., & Sommerness, J. (2021). *Comprehensive inclusive education: General education & the inclusive IEP*. TIES Center. <https://publications.ici.umn.edu/ties/comprehensive-inclusive-education/main>

Webb, N.L. (2002). *Assessment literacy in a standards-based urban education setting. Paper presented at American Educational Research Association Annual Meeting*, New Orleans, Louisiana, April 1–5. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.573.676&rep=rep1&type=pdf>

Young, V.M., & Kim, D.H. (2010). Using assessments for instructional improvement: A literature review.

Education Policy Analysis Archives, 18(19), XXX–XXX. <http://epaa.asu.edu/ojs/article/view/809>

About the Authors

Sheryl S. Lazarus, Ph.D., is the Director for the National Center on Educational Outcomes, Masonic Institute for the Developing Brain/University of Minnesota, 2025 East River Parkway, Minneapolis, MN 55414. E-mail: laza0019@umn.edu

Susan M. Brookhart, Ph.D., is Professor Emerita in the School of Education at Duquesne University. E-mail: suebrookhart@gmail.com

Gail Ghere, Ph.D., is a Research Associate for the National Center on Educational Outcomes, Masonic Institute for the Developing Brain/University of Minnesota, 2025 East River Parkway, Minneapolis, MN 55414. E-mail: ghere002@umn.edu

Kristin K. Liu, Ph.D., is the Assistant Director for the National Center on Educational Outcomes, Masonic Institute for the Developing Brain/University of Minnesota, 2025 East River Parkway, Minneapolis, MN 55414. E-mail: kline010@umn.edu

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