The Formative Assessment Practices Landscape for Students with Disabilities: An Analysis of State Definitions and Practices, 2021

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Executive Summary

To support students' learning and development as autonomous learners, increased attention is being given to formative assessment practices and how to support their use. Prior research found that formative assessment practices has the potential to support all students, including students with disabilities, and their educators in the classroom (see, for example, Butler, 2003; Butler et al., 2013; Fuchs & Fuchs, 1986). At the state level, there have been efforts to develop or adopt formal definitions of formative assessment practices that guide how these practices are used in instruction. Given the different approaches and definitions that might exist for formative assessment practices, this report aims to describe how states are communicating and supporting these practices with their districts and schools.

This report outlines the approaches that state education agencies (SEAs) have taken in defining and using formative assessment practices, including practices to explicitly support students with disabilities. Our review found multiple approaches. Some states were using definitions of formative assessment practices developed by the Council of Chief State School Officers' (CCSSO's) Formative Assessment for Students and Teachers (FAST) collaborative, while others used definitions developed by the Smarter Balanced assessment consortium, and still others used their own state-developed definitions. Although the breadth of resources varied across states, most states provided support for formative assessment practices either through the development of their own resources or the use of third-party resources.

Considering the positive impact that formative assessment practices can have on students with disabilities, this work also examined how states provided resources that highlight inclusive and accessible practices. After compiling and reviewing information and resources from all 50 SEA websites, we found limited state resources that focused on the intersection between formative assessment practices and the needs of students with disabilities. This national landscape scan affirmed that there is still much work to be done on developing and disseminating resources highlighting formative assessment practices that are inclusive of students with disabilities.

The report includes several strategies that SEAs may want to consider that will support the use of formative assessment practices to improve instruction and learning for all students, including students with disabilities:

1. Review SEA's definition of formative assessment to ensure that it does not exclude any students; revise (or develop a definition) if needed.

2. Ensure that SEA's resources and materials on the use of formative assessment practices explicitly include students with disabilities.

3. Provide professional development that will help educators learn how to confidently use formative assessment practices to support the learning of all students.

Table of Contents

Executive Summary iii
Background 1
Method 2
Results 2
Defining Formative Assessment 2
State Strategies Supporting Formative Assessment and Students with Disabilities 3
Discussion 5
References 7
Appendix A: Definitions of Formative Assessment by SEA 9
Appendix B: Resources on Formative Assessment Practices and Students with Disabilities . 12

Background

Research has found that formative assessment practices have the potential to support all students, including students with disabilities, and their educators in the classroom (see, for example, Butler, 2003; Butler et al., 2013; Fuchs & Fuchs, 1986). As education continues to change and adapt in the face of disrupted learning, the use of formative assessment practices is becoming increasingly recognized and used as a way to measure student progress toward learning outcomes and to support all students, including students with disabilities, in taking active roles in their learning (Brookhart & Lazarus, 2017; Center for Standards, Assessment, and Accountability, n.d.; Nordengren, 2020)

Black and Wiliam (1998) defined ***formative assessment*** as "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" (p. 82). This definition and the implementation of formative assessment practices has been widely adopted and modified by state education agencies (SEAs), education research organizations, and schools and districts across the United States.

Much of the support for implementation and development of formative assessment practices occurs at the individual state level, where many states have defined and acknowledged the term, "formative assessment" within their SEA and then disseminated definitions and implementation supports to local education agencies (LEAs).

The purpose of this report is to provide a scan of the national landscape of definitions of formative assessment. We also sought to identify resources available from SEAs to encourage the development and use of formative assessment practices, especially those that might support formative assessment practices for students with disabilities. It is important to consider how to develop formative assessment practices that are effective and inclusive for all students, including students with disabilities, to ensure that all have opportunities to engage in these beneficial practices.

This scan focused on three research questions:

1. How does each state define formative assessment as communicated by the SEA website?

2. In what ways do SEAs support educators' use of formative assessment practices?

3. What strategies or approaches are states taking to support the use of formative assessment practices for students with disabilities?

This report details current information on SEA definitions and support of the formative assessment process, and highlights several states' ongoing work in developing and supporting formative assessment practices for students with disabilities.

Method

Our scan of the national landscape of formative assessment practices involved reviewing SEA websites and publicly-available resources to understand how SEAs are both defining formative assessment and supporting the use of formative assessment practices for students with disabilities. The scan was conducted in Fall, 2021.

We compiled resources and information from all 50 SEA websites, and reviewed resources focused on comprehensive, balanced assessment systems and the use of formative assessment practices within these systems, but recognize that we may not have located all publicly posted information. For example, at different spots on some states' websites, there may be different definitions of formative assessment, and we may have missed some of them because we ended the search process when a definition was found.

Results

Defining Formative Assessment

Our scan of formative assessment definitions suggested they could be categorized into four groups:

- State used a definition provided by the Council of Chief State School Officers' (CCSSO's) Formative Assessment for Students and Teachers (FAST) collaborative:

  Formative assessment is a planned, ongoing process 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).

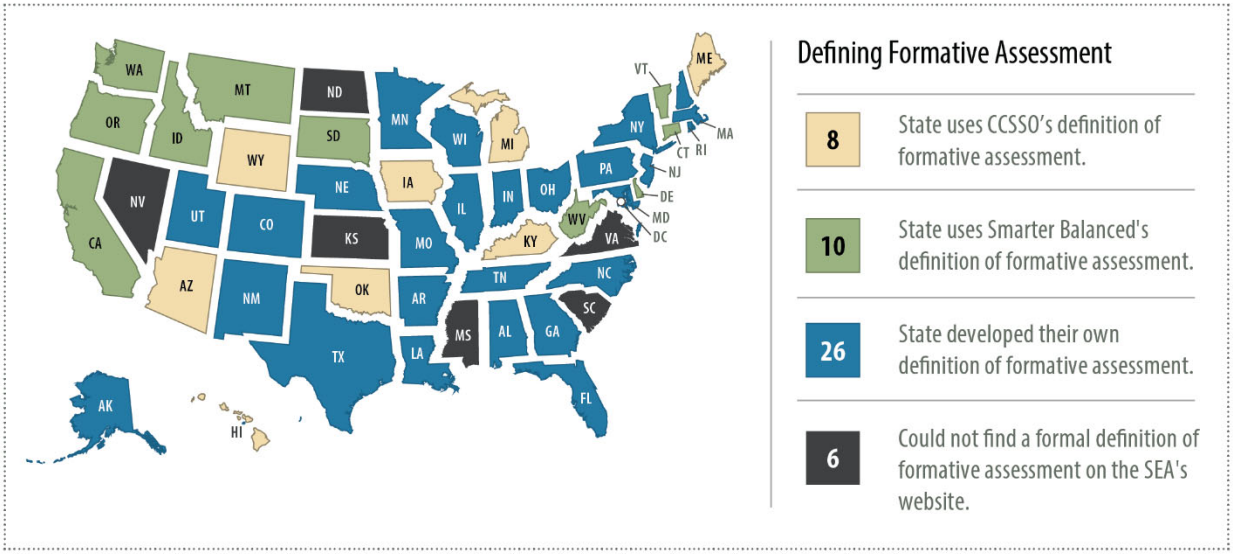
- State used a definition provided by the Smarter Balanced assessment consortium:

  The Formative Assessment Process is a deliberate process used by teachers and students during instruction that provides actionable feedback that is used to adjust ongoing teaching and learning strategies to improve students' attainment of curricular learning targets/goals" (Smarter Balanced, 2021, p. 1).

- State developed its own definition
- No state definition of formative assessment could be found on the SEA website

Figure 1 portrays the states that our scan indicated fell into each of the four categories of formative assessment definitions. Appendix A presents the definitions we found for each state.

Figure 1. SEA Approaches to Defining Formative Assessment



The scan found that eight states had adopted CCSSO's definition of formative assessment or adapted some variation of it into their own state's definition. Ten states, all members of the Smarter Balanced assessment consortium, used the Smarter Balanced definition of formative assessment. More than half of the states (n = 26) developed their own definition, which often focused on different aspects of the formative assessment process (e.g., differences across content areas or grade levels, professional learning) than the CCSSO or Smarter Balanced definition. However, most states with a definition shared a common understanding that formative assessment involved the use of formative assessment processes and included a focus on ongoing instruction, reflection, feedback, and adjustment to support the needs of students. No definition of formative assessment was found for six states.

State Strategies Supporting Formative Assessment and Students with Disabilities

Our scan indicated that strategies states used to support formative assessment practices, particularly for students with disabilities, were based on four types of resources:

CCSSO Resources. CCSSO has several resources for states on formative assessment practices including the definition document (FAST, 2018) and a resource pertaining to formative assess-

ment practices for students with disabilities (Brookhart & Lazarus, 2017), which can support states in developing and implementing the use of these practices.

Smarter Balanced Resources. Smarter Balanced provides a suite of tools, called *Tools for Teachers* (Smarter Balanced, 2022). These tools were created to provide educators, students, and families with standards-aligned assessments, student performance data, classroom instructional support, and professional learning. These tools included:

- Formative assessment and accessibility strategies embedded in every instructional resource
- Responsive, accessible instructional resources aligned with learning and accessibility standards
- Interactive connections playlists of resources linked to interim assessments
- Accessibility resources for students with disabilities, such as universal tools, designated supports, and accommodations

Third-party Resources. Several states used resources developed by third parties. Utah is an example of a state that used a third party vendor to create a customized formative assessment. The tool is called Utah Compose (Measurement Incorporated, n.d.), which is a formative assessment tool that was provided free of charge to all public school teachers and students in grades 3-12. It is a web-based writing program designed to help students improve writing through practice, immediate feedback, and guided instructional support. It includes a peer review feature where students can request feedback from their classmates. The tool's prompts, scoring levels, and graphic organizers allow educators to differentiate the administration of the assessment within the same class, which can be useful when administering to a broad range of students.

Several states have tools created by third party vendors that allow teachers to create test items. These resources were very loosely linked to formative assessment practices. For example, this analysis found that the Georgia Department of Education (2020) used TestPad. TestPad allows teachers and administrators to create their own multiple choice and constructed response items and reading passages, and align them to standards. Several items then be can be combined to create a test that is administered to students through the state's state longitudinal data system (SLDS) student portal. Educators can use the assessments formatively to inform instruction or summatively to measure learning. The items, passages, and tests that are developed can be shared in a bank among teachers within the same school, and among administrators within the same district. TestPad resources included accommodation guidelines for students with disabilities.

State-developed Resources. Some states developed their own resources. An example of a state that developed its own formative assessment resources that are inclusive of students with

disabilities is Michigan. The Michigan Department of Education sponsors Formative Assessment for Michigan Educators (FAME) (n.d.), a statewide learning initiative promoting teacher collaboration and planning on formative assessment. FAME is designed to reach all Michigan teachers and administrators with training on the use of formative assessment practices. Some resources provided by FAME include professional learning modules and formative assessment strategies for supporting students with disabilities online.

Kentucky is another example of a state that developed its own resources about the use of formative assessment practices. In response to the COVID 19 pandemic, the state created a document on considerations for reopening schools that contained extensive information about the use of formative assessment practices (Kentucky Department of Education, 2020). The document included links to resources about including students with disabilities when using these practices. Kentucky emphasized the vital role that formative assessment practices can play:

> For teachers to meet the needs of their students and to close gaps, it is imperative that educators identify and implement evidence-based practices for incorporating formative assessment into their daily instructional routines. The minute-by-minute, daily and weekly use of formative process provides teachers with the information they will need to make instructional adjustments that moves learning forward for all students (Kentucky Department of Education, 2020, p. 2).

Discussion

Our review of current SEA formative assessment resources highlighted the multiple approaches that states have taken toward developing or adopting a guiding definition. Although most states offered some form of resource to support the use of formative assessment practices, very few states had resources that considered the needs of students with disabilities. This national landscape scan affirmed that there is still much work to be done on developing and disseminating resources highlighting formative assessment practices that are inclusive of students with disabilities. SEAs may want to consider several strategies that will support the use of formative assessment practices to improve instruction and learning for all students, including students with disabilities:

- **Review SEA's definition of formative assessment to ensure that it does not exclude any students; revise (or develop a definition) if needed.** All students, including students with disabilities, benefit from the use of formative assessment practices. A very narrow definition could potentially limit the opportunities of some students with disabilities to benefit from use of these beneficial practices.

- **Ensure that SEA's resources and materials on the use of formative assessment practices explicitly include students with disabilities.** Formative assessment practices have the potential to help all students. Explicitly including information about students with disabilities in materials about formative assessment practices will help educators better support the learning of all students, including students with disabilities. See Appendix B for several resources that may be useful when developing formative assessment practices resources that are inclusive of students with disabilities.

- **Provide professional development that will help educators learn how to confidently use formative assessment practices to support the learning of all students.** Many educators may not have the knowledge and skills needed to successfully use formative assessment practices with some students with disabilities. They may need training on differentiating instruction, using principles of universal design, and providing accessibility when using formative assessment practices.

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). *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. https://ccsso.org/sites/default/files/2017-12/Formative_Assessment_for_Students_with_Disabilities.pdf

Brookhart, S., & Lazarus, S. S. (2020). *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

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., & Cartier, S. C. (2013). Layers of self- and co-regulation: Teachers' co-regulating learning and practice to foster students' self-regulated learning through reading (Article ID 845694). *Education Research International.* Vol. 2013. https://doi.org/10.1155/2013/845694

CAST (2018). *Universal design for learning guidelines* (version 2.2). http://udlguidelines.cast.org

Center for Standards, Assessment, and Accountability. (n.d.). *Getting started in formative assessment.* WestEd. https://csaa.wested.org/formative-insights/learning-resource/getting-started-in-formative-assessment/

Chappuis, J., Stiggins, R., Chappuis, S., & Arter, J. (2009). *Classroom assessment for student learning: Doing it right - using it well* (2nd ed.). Assessment Training Institute, Inc. https://play.google.com/store/books/details/Classroom_Assessment_for_Student_Learning_Doing_It?id=2YouAAAAQBAJ&gl=US

Formative Assessment for Michigan Educators (FAME). (n.d.). *FAME*. https://famemichigan.org/

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

Fuchs, L. S., & Fuchs, D. (1986). Effects of systematic formative evaluation: A meta-analysis. *Exceptional Children, 53*(3), 199-208.

Georgia Department of Education. (2020). *TestPad.* https://www.gadoe.org/Technology-Services/Enterprise-Systems-and-Applications/SLDS/Pages/TestPAD-Training-and-Support.aspx

Kentucky Department of Education. (2020). *COVID-19 considerations for re-opening schools.* https://education.ky.gov/comm/Documents/Academic%20Re-entry%20Stage%202%20FINAL.pdf

McLeskey, J., Barringer, M-D., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., Lewis, T., Maheady, L., Rodriguez, J., Scheeler, M. C., Winn, J., & Ziegler, D. (2017). *High-leverage practices in special education*. Council for Exceptional Children & CEEDAR Center. https://highleveragepractices.org/sites/default/files/2020-10/Assessmentfinal.pdf

Measurement Incorporated. (n.d.). *Utah compose*. https://utahcompose.com/

Nordengren, C. (2020, October 15). *The power of formative assessment when the only constant is change*. NWEA Teach. Learn. Grow. blog. https://www.nwea.org/blog/2020/power-of-formative-assessment-when-only-constant-is-change/

Smarter Balanced. (2021). *Understanding the formative assessment process* (Tools for Teachers). The Regents of the University of California. https://portal.smarterbalanced.org/library/en/formative-assessment-process.pdf

Smarter Balanced. (2022). *Tools for teachers.* The Regents of the University of California. https://smartertoolsforteachers.org/

Appendix A

Definitions of Formative Assessment by SEA

State Name	Definition
Alabama	Formative assessment, when well-implemented, should be called formative instruction because it is a process with the purpose of evaluating student understanding in order to provide specific feedback to students in order to adjust instruction on a moment-to-moment basis.
Alaska	Formative assessment: a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement as intended.
Arizona	Uses CCSSO definition.
Arkansas	Classroom formative assessment: During and throughout the instructional cycle as learning is happening, teachers should help to guide instruction as it is happening. Teachers should monitor and adjust based on these types of assessments.
California	Uses Smarter Balanced definition. The state also supplements Smarter Balanced's definition with further description of formative assessment: Formative assessment is a process, not a test.
Colorado	Quick check for learning conducted by teachers throughout their class.
Connecticut	Uses Smarter Balanced definition.
Delaware	Uses Smarter Balanced definition.
Florida	Ongoing assessment is sometimes known as formative assessment or progress monitoring. It is designed to provide information during the teaching and learning process and to help you analyze, based on the data, how you are doing as a teacher and how your students are doing as learners.
Georgia	Formative assessment is assessment for learning. It takes place while instruction is still occurring to gather immediate feedback that identifies students' academic strengths and areas for growth, to plan differentiated instruction, and to support student learning.
Hawaii	Uses CCSSO definition.
Idaho	Uses Smarter Balanced definition.
Illinois	The formative assessment process provides a framework that demonstrates beginning teachers' growth/progress and engages beginning teachers and their mentors in an ongoing, reflective process.
Indiana	Formative and interim assessments and the use of their data to guide classroom instruction at the individual student level result in increased academic success.
Iowa	Uses CCSSO definition.
Kansas	Did not find a formal definition of formative assessment.
Kentucky	Uses CCSSO definition.
Louisiana	Interim assessments: Evaluate student learning and monitor progress toward year-end goals and allow teachers to target and adjust instruction; administered at checkpoints throughout the year.

State Name	Definition
Maine	Uses CCSSO definition.
Maryland	Supports learning during the learning process, involves both teachers and students in ongoing dialogue, descriptive feedback, and reflection through instruction.
Massachusetts	A formative assessment occurs mid-cycle and provides feedback that informs an educator's practice, showing where s/he stands relative to standards and goals, and what s/he can work on next.
Michigan	Uses CCSSO definition.
Minnesota	When formative assessments are embedded throughout regular instruction, it can help teachers to clarify learning intentions and identify where students are at in their learning. These types of formative assessments are short, purposeful, and can be used to differentiate instruction to guide students where they need to go next.
Mississippi	Did not find a formal definition of formative assessment.
Missouri	Common formative assessment at the classroom level is a systematic and cyclical process designed to provide timely teacher/student feedback on curricula and student learning to improve both instructional practices and academic achievement. Common formative assessment is not another instrument or event—but rather it is a collection of practices to improve teaching and accelerate learning (Chappius et al., 2009).
Montana	Uses Smarter Balanced definition.
Nebraska	Formative assessments check for student understanding during instruction. Given as needed, daily in the classroom throughout the year to help teachers address student learning needs in-the-moment. These are educator created tests.
Nevada	Did not find a formal definition of formative assessment.
New Hampshire	Assessment is for learning. Self-direction and collaboration are essential skills in the formative assessment process and metacognition is deeply embedded in these skills.
New Jersey	Formative assessments allow for measuring student proficiency of those target skills as the year of instruction progresses.
New Mexico	Formative assessment practices are inseparable from instruction and provide in-the-moment feedback to students and to gain insight into student thinking so teachers can adjust instruction to best meet students' learning needs.
New York	The assessments that we can conduct throughout teaching and learning to diagnose student needs, plan our next steps in instruction, provide students with feedback they can use to improve the quality of their work, and help students see and feel in control of their journey to success. Each one reveals to students increments of achievement and how to do better next time. On these occasions, the grading function is laid aside.
North Carolina	In the formative assessment process, teachers collect evidence of learning to guide teaching and learning.
North Dakota	Did not find a formal definition of formative assessment.

State Name	Definition
Ohio	Formative assessments are administered to gather information that can guide student learning. Unlike their summative counterparts, formative assessments typically serve no official evaluation purpose: grades are not assigned, and assessment outcomes are not used for accountability purposes. Both students and educators work collaboratively to identify learning goals, monitor progress, and incorporate feedback throughout a unit of instruction. Strategies for formative assessment can vary from one classroom to the next.
Oklahoma	Uses CCSSO definition.
Oregon	Uses Smarter Balanced definition.
Pennsylvania	Classroom-based assessment that allows teachers to monitor and adjust their instructional practice in order to meet the individual needs of students.
Rhode Island	Formative assessment is a process that takes place in the classroom to enable learning. It takes place continuously to assure an ongoing cycle of evidence collection and feedback to help move learning forward.
South Carolina	Did not find a formal definition of formative assessment.
South Dakota	Uses Smarter Balanced definition.
Tennessee	Formative (Interim, Benchmark) Assessment: Measures student learning throughout the year so educators can determine if students are making progress and how best to adjust instruction; for purposes of this Tennessee report, formative refers to interim and benchmark assessments as well.
Texas	Used to measure student performance on specific student expectations to inform a teacher's instructional choices, such as making adjustments to unit and lesson plans.
Utah	Formative Assessment is a planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to give teachers and students the opportunity to identify strengths and weaknesses with specific knowledge, skills, and abilities outlined in the Utah Core Standards. It is often referred to as assessment for learning.
Vermont	Uses Smarter Balanced definition.
Virginia	Did not find a formal definition of formative assessment.
Washington	Uses Smarter Balanced definition.
West Virginia	Uses Smarter Balanced definition.
Wisconsin	Formative assessment or formative practices play a critical role in strategic assessment systems. They are designed to quickly inform instruction by providing specific and immediate feedback through daily, ongoing instructional strategies that are student- and classroom-centered, and that answer "what comes next for student learning?"
Wyoming	Uses CCSSO definition.

Note: Definitions were taken from individual SEA websites.

Appendix B

Resources on Formative Assessment Practices and Students with Disabilities

This appendix contains information about several resources that provide information on designing or adapting formative assessment practices for students with disabilities:

- CCSSO published a report titled *Formative Assessment for Students with Disabilities* (Brookhart & Lazarus, 2017) that illustrated how formative assessment practices can be used to benefit students with disabilities so they have equitable access to instruction. This paper includes specific examples of formative assessment practices that have been used with students with disabilities, as well as considerations for adapting existing practices to make them more accessible.

- The National Center on Educational Outcomes (NCEO) published several briefs on the intersection of assessment and inclusion of students with disabilities that provide useful information during in-person, hybrid, and distance learning:

    - *Five Formative Assessment Strategies to Improve Distance Learning Outcomes for Students with Disabilities* (Brookhart, 2020)

    - *Pre-assessment to Plan Instruction for Students with Disabilities During Distance Learning* (Brookhart & Lazarus, 2020)

- *Universal Design for Learning Guidelines* (CAST, 2018) provides a framework for improving and optimizing teaching and learning for all students, including students with disabilities. Universal Design for Learning (UDL) guidelines can help educators understand how to use different modes for engagement, representation, action, and expression to make learning accessible based on students' learning needs. The UDL guidelines can help educators think about accessible design of formative assessment practices and identify possible barriers to student participation.

- The Council for Exceptional Children's (CEC's) *High Leverage Practices for Students with Disabilities* (McLeskey et al., 2017) were designed to support special education practitioners with a key focus on assessment. One practice encourages special educators to compile a comprehensive learner profile that is sensitive to the unique strengths and needs of students with disabilities.

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