



ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT

Toolkit 5 of 10 in the Utah Teacher Toolkit Series

Prepared for Utah Leading through Effective, Actionable, and Dynamic (ULEAD) Education

In this toolkit, Hanover Research and ULEAD explore strategies and resources that current and aspiring teachers can utilize to meet **Standard 5: Assessment** of the Utah Effective Teaching Standards and Indicators.

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INTRODUCTION

This toolkit provides guidance and resources to assist current and aspiring Utah teachers in developing their ability to support the growth and learning of all students via effective pedagogies and a commitment to students, families, schools, and the broader mission of education. In particular, **Utah teachers should constantly strive to align their daily work, skills development, and professional dispositions to the ten standards and related indicators of the Utah Effective Teaching Standards** (located [here](#)). Commitment to achieving these standards will allow teachers to support the mission of public education to “ensur[e] literacy and numeracy for all Utah children, provid[e] high quality instruction for all Utah children, [establish] curriculum with high standards and relevance to all Utah children, and requir[e] effective assessment to inform high quality instruction and accountability.”¹ Specifically, this toolkit provides teachers with tips, strategies, and resources to support their professional work and development around **Standard 5: Assessment**.

Utah Effective Teaching Standard 5: Assessment

 The Learner and Learning	Standard 1: Learner Development	<p>Instructional Practice</p> <p>Effective instructional practice requires that teachers have a deep and flexible understanding of their content areas and be able to draw upon content knowledge as they work with learners to access information, apply knowledge in real-world settings, and address meaningful issues. They must also understand and integrate assessment, planning, and instructional strategies in coordinated and engaging ways to assure learner mastery of the content.</p> <hr/> <p>Standard 5: Assessment</p> <p>The teacher uses multiple methods of assessment to engage learners in their own growth, monitor learner progress, guide planning and instruction, and determine whether the outcomes described in content standards have been met. The teacher:</p> <ul style="list-style-type: none"> ▪ Designs or selects pre-, formative, and summative assessments in a variety of formats that match learning objectives and engage the learner in demonstrating knowledge and skills; ▪ Engages students in understanding and identifying the elements of quality work and provides them with timely and descriptive feedback to guide their progress in producing that work; ▪ Adjusts assessment methods and makes appropriate accommodations for English language learners, students with disabilities, advanced students, and students who are not meeting learning goals; ▪ Uses data to assess the effectiveness of instruction and to make adjustments in planning and instruction; ▪ Documents student progress and provides descriptive feedback to students, parents, and other stakeholders in a variety of ways; and ▪ Understands and practices appropriate and ethical assessment principles and procedures.
	Standard 2: Learning Differences	
	Standard 3: Learning Environments	
 Instructional Practice	Standard 4: Content Knowledge	
	Standard 5: Assessment	
	Standard 6: Instructional Planning	
	Standard 7: Instructional Strategies	
 Professional Responsibility	Standard 8: Reflection and Continuous Growth	
	Standard 9: Leadership and Collaboration	
	Standard 10: Professional and Ethical Behavior	

Source: Utah State Board of Education²

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: EXECUTIVE SUMMARY

Research shows that **teachers are the most influential and impactful element of the formal school system in promoting student achievement.** In fact, research estimates that teachers “have two to three times the effect of any other school factor, including services, facilities, and even leadership.”³ As the immediate organizers and supervisors of students’ educational experiences, teachers exert tremendous influence on student outcomes across multiple areas.⁴ These effects extend across dynamics such as academic achievement, attendance, social-emotional learning, behavior, future earnings, and college attendance.⁵

Given their influence, **teachers should strive to maximize their effectiveness in all facets of their daily work,** from planning and delivering instruction, to establishing a safe and secure learning environment, and maintaining professionalism.⁷ This requires an awareness of learners’ needs, of systemic expectations, and of one’s own strengths and weaknesses as they relate to professional practices and pedagogies.⁸ It also requires teachers taking concerted actions to expand their content knowledge, strengthen their instructional skills, and maintain a professional and positive mindset with students, families, and colleagues.⁹

Aspects of Effective Teaching



Source: Association for Supervision and Curriculum Development⁶

This **Assessing Learning in Relevant and Constructive Ways Toolkit** and the nine accompanying toolkits in the *Utah Teacher Toolkit Series* support Utah's current and aspiring teachers in meeting the demands of the Utah Effective Teaching Standards. In particular, this toolkit will help users progress toward those indicators identified as high-effectiveness for Standard 5: Assessment.

Indicators of High-Effectiveness for Standard 5: Assessment

The highly effective teacher:

- Selects and integrates varied assessment types and involves learners in demonstrating knowledge and skills;
- Engages students in regularly producing quality work and supports students in self-assessment and goal-setting;
- Provides students with timely and descriptive feedback to guide their progress in producing quality work;
- Modifies assessment methods and makes appropriate accommodations for English language learners, students with disabilities, advanced students, and students who are not meeting learning goals;
- Uses formative and summative inputs to reflect on and make ongoing modifications in instruction that result in increased learner achievement;
- Selects or designs a variety of effective formats to document and provide feedback on student progress; and
- Supports students in their understanding of ethical assessment principles and procedures and provides an ethical learning environment to support them.

Source: Utah State Board of Education¹⁰

OVERVIEW

This toolkit:

- ✓ [Examines and clarifies the purpose of common assessment types](#) to help teachers understand the basics of when, how, and why to administer assessments in the classroom;
- ✓ [Explores key design features](#) of formative and summative assessment that ensure they generate the most utility for teachers, students, and families; and
- ✓ Presents guidance on how to [use assessment data to improve instruction](#) in order to support students with different needs and operating at variable levels of content and skills mastery.







AUDIENCE

This toolkit is designed to support current and aspiring K-12 teachers in the state of Utah in meeting the indicators and expectations outlined in the Utah Effective Teaching Standards, particularly Standard 5: Assessment.

UNDERSTAND ASSESSMENT TYPES AND PURPOSES

Teachers should recognize that assessments should have a clear purpose and focus in order to be effectively designed, administered, and used to guide decision-making.¹¹ Based on when assessments are delivered and whom they are delivered to, they assume a variety of functions and generate data around those functions.¹² For example, *pre-assessments* (i.e., those that occur before a lesson or unit) can help teachers determine the existing knowledge and skills that students possess to guide planning, while *formative* or *interim assessments* (i.e., those that occur during a lesson or unit) measure students' developing knowledge and skills in the midst of an instructional sequence.¹³ Comparatively, *summative assessments* measure students' performance at the conclusion of a lesson or unit, typically as a determination of growth or proficiency relative to an established content standard or benchmark.¹⁴

Key Classroom Assessment Types

TYPE	DESCRIPTION
 Pre-Assessments	Pre-assessments are administered before students begin a lesson, unit, course, or program. Students are not necessarily expected to know most, or even any, of the included material. They are generally used to establish a baseline against which educators measure learning progress over the duration of a program, course, or instructional period or to determine general academic readiness for a course, program, grade, or new program a student may be transferring into.
 Formative Assessments	Formative assessments are in-process evaluations of learning that are typically administered multiple times during a unit, course, or program. The general purpose of formative assessment is to give educators in-process feedback about what students are and are not learning so that instruction, curriculum materials, and academic support can be modified accordingly. Formative assessments are usually not scored or graded, and they may take a variety of forms.
 Interim Assessments	Interim assessments are used to determine whether students are on track to performing well on future assessments, such as standardized tests, end-of-course exams, and other forms of summative assessment. Interim assessments are usually administered periodically during a course or school year (e.g., every six or eight weeks) and separately from the process of instructing students, unlike formative assessments which are integrated into the instructional process.
 Summative Assessments	Summative assessments are used to evaluate student learning at the conclusion of a specific instructional period (e.g., a unit, course, semester, program, or school year). They are typically scored and graded tests, assignments, or projects that are used to determine whether students have learned what they were expected to learn during the defined instructional period.
 Common Assessments	Common assessments are used in a school or district to ensure that all teachers are evaluating student performance in a consistent, reliable, and effective manner. Common assessments facilitate greater consistency in teaching and evaluation practices among teachers who are responsible for the same content. They allow educators to compare performance results across multiple classrooms, courses, schools, and/or learning experiences. Common assessments share the same format, are administered in consistent ways, and may be formative or summative.
 Standardized Assessments	Standardized assessments are designed, administered, and scored in a consistent manner. They often use a multiple-choice format, though some include open-ended, short-answer questions. Historically, standardized tests featured rows of ovals that students filled in with a number-two pencil, but increasingly the tests are computer-based. Standardized tests can be administered to large student populations of the same age or grade level in a state, region, or country, and results can be compared across individuals and groups of students.

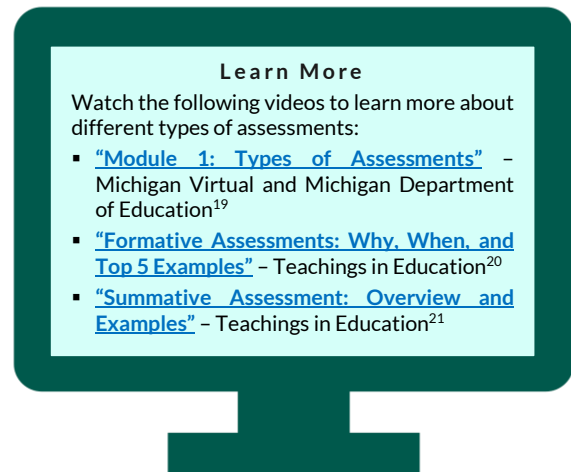
Source: Glossary of Education Reform | Great Schools Partnership¹⁵

Teachers should further distinguish between assessments of students' learning (e.g., summative) and those administered for the promotion of learning and even as learning tasks in and of themselves (e.g., formative).¹⁶ Assessments of learning help teachers evaluate whether the anticipated degree of learning or skills growth has

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occurred by a pre-determined endpoint such as the end of a unit or the conclusion of the school year.¹⁷ Thus, the purpose of such assessments is to “certify mastery of student learning [and] determine whether students are prepared to move on to the next unit of instruction in a sequence.”¹⁸

Comparatively, assessments *for* or *as* learning are non-evaluative and provide insight to teachers and students about student progress toward the objectives that will be addressed in summative assessments.²² Assessments *for* learning provide teachers with information to adjust future instruction and to reteach topics where there is a need.²³ Likewise, formative and interim assessments help students gather insight into their own progress while also encouraging them to reflect on their skills and knowledge relative to the curriculum standards for the target discipline.²⁴ In order to accomplish these dual purposes, teachers should ensure that assessments *for* and *as* learning are planned at important junctures in curricula and that they remain prominent in the overall instructional process to help students achieve outlined objectives and performance indicators.²⁵



Assessments For, As, and Of Learning

	ASSESSMENT FOR LEARNING	ASSESSMENT AS LEARNING	ASSESSMENT OF LEARNING
PURPOSE	Enabling teachers to determine next steps to advance student learning and provide additional support and enrichment	Providing opportunities for each student to monitor and critically reflect on their learning and identify next steps	Certifying and informing teachers, students, and families of growth and proficiency in relation to curriculum standards
FOCUS	Students’ progress and learning needs in relation to curriculum standards	Students’ thinking about learning and the strategies they use to support their learning	The extent to which students apply knowledge, skills, and attitudes embedded in standards
FUNCTION	<ul style="list-style-type: none"> ▪ Providing students and families with descriptive feedback on progress ▪ Guiding differentiation 	<ul style="list-style-type: none"> ▪ Helping students develop independent learning habits ▪ Engaging students in the learning process alongside skills and knowledge development 	<ul style="list-style-type: none"> ▪ Measuring students’ level of learning ▪ Generating evidence on student placements, course completion, and grades

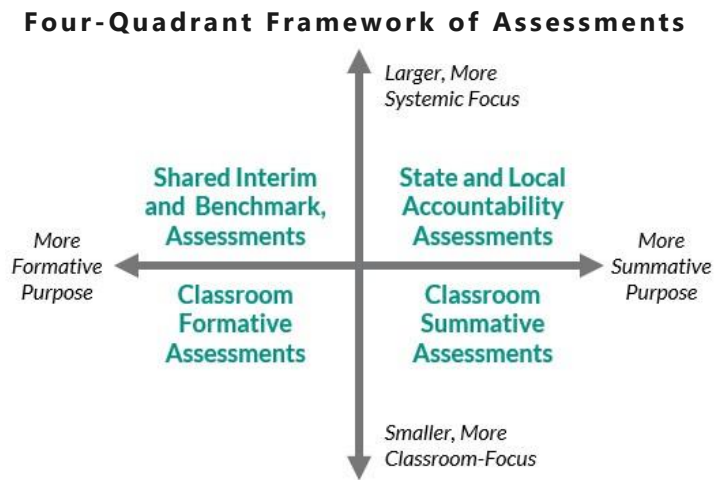
Source: Centre for Innovation and Excellence in Learning, Lakehead University²⁶

Teachers should also recognize that different assessment types produce varying levels of data that can be used to inform instructional decision-making.²⁷ Generated data will depend on when a given assessment is administered (i.e., before, during, or after instruction), who completes the assessment (e.g., a single class, an entire grade-level), and what content or skills are tested.²⁸ Thus, prior to administration of any assessment, teachers should clarify exactly what kind of evidence and outcomes data the assessment will elicit, as well as how that evidence and data can be used to guide decision-making and progress-monitoring.²⁹

Indeed, the focus and timing of a given assessment lends itself to different forms of decisions.³⁰ For example, a pre-assessment given before a curriculum unit can help teachers determine how to weigh different elements of the content in subsequent instruction. Comparatively, an end-of-year state accountability assessment will help

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an entire school or district determine strengths and weaknesses in their educational programming, likely resulting in systemwide adjustments to curriculum and instruction in the next school year.³¹



Source: Association for Supervision and Curriculum Development³²

ADHERE TO EFFECTIVE DESIGN FEATURES

In addition to understanding the functions and purposes of assessment types, teachers must be familiar with effective design features to assess learning accurately and appropriately and ensure cohesion between instruction, curriculum standards, and assessments.³³ Ideally, teachers will “[b]egin with the end in mind” before planning and delivering instruction and administering formative and summative assessments.³⁴ This means that teachers should know grade-level and subject area content standards, how to assess various levels of performance relative to those standards, and what curricular sequences should look like to prepare students to master the standards and excel on aligned assessments.³⁵

There should be obvious alignment between assessments, standards, and planned instruction.³⁷ Assessments, standards, and

instruction should address the same skills, content knowledge, and applications of skills and knowledge at corresponding levels of cognitive rigor (e.g., Bloom’s taxonomy).³⁸ Such alignment:³⁹

- Facilitates articulation of relevant and appropriate performance criteria for the skills and knowledge embedded in target learning standards;
- Supports development of rigorous and challenging tasks that will engage students and push them toward proficiency or mastery performance levels; and
- Helps students and families understand learning sequences, corresponding assessments, and the connections between the two.

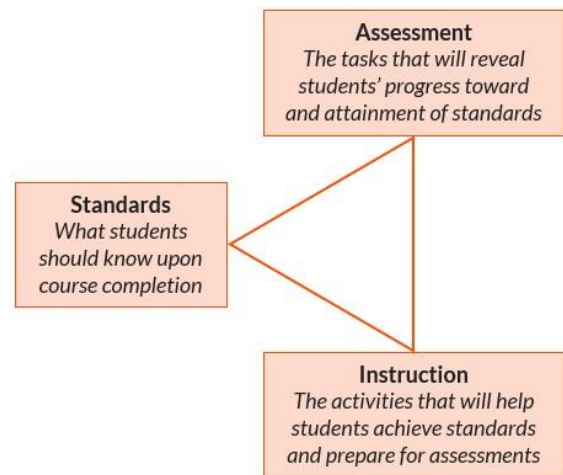
To support alignment between standards, assessments, and instruction, teachers can use the [Standards, Assessment, and Instruction Alignment Worksheet](#) located on pp. 14-16. This worksheet features prompts that ask users to outline the standards they seek to target via instruction and assessment. It also asks users to brainstorm potential learning activities to prepare students to meet those standards and tasks to show their knowledge and skills during formative and summative assessments.

In addition, **teachers should define performance criteria and describe the nature of component tasks for assessments prior to using them with students.**⁴⁰

Basically, teachers should create rubrics, articulate expectations, and clarify assessment item types so that students—and their families—understand broader expectations, as well as the distinctions in expectations at different levels of performance or achievement.⁴¹ In particular, teachers should:⁴²

- Create assessment tasks and questions around the outcomes under focus;
- Articulate the evidence and indicators to be generated by tasks and questions to determine if students are meeting the stated outcomes and goals and whether instruction has been effective; and
- Identify multiple methods to gather evidence about how students perform.

Aligning Instruction, Assessment, and Curriculum Standards








Source: Eberly Center for Teaching Excellence and Educational Innovation, Carnegie Mellon University³⁶

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In addition, teachers should design assessment tasks that will produce valid and reliable data corresponding with the target learning standards and the defined performance criteria.⁴³ Essentially, assessments should measure the skills and knowledge they intend to measure as outlined in curriculum standards (i.e., validity). Moreover, these measurements should accurately quantify students' performance for those skills and knowledge points (i.e., reliability).⁴⁴

By creating questions and tasks that generate valid and reliable data, teachers can better evaluate student progress, and students and their families can acquire a clear understanding of student performance relative to standards and the indicators for meeting those standards.⁴⁵ Thus, assessment validity and reliability help ensure that teachers, students, and families receive actionable feedback upon which to adjust their larger collaborative approach to teaching and learning.⁴⁶

Five Attributes of High-Quality Assessments

ATTRIBUTE	DESCRIPTION
 <p>Focus on Higher-Order Thinking Skills</p>	Assessment tasks should tap “higher-level” cognitive skills that support transferable learning, rather than emphasizing rote learning and the use of basic procedures. While there is a necessary place for basic skills and procedural knowledge, it must be balanced with attention to critical thinking and applications of knowledge to new contexts.
 <p>Emphasis on Critical Abilities</p>	In addition to key subject matter concepts, assessments should include the critical abilities articulated in standards, such as communication, collaboration, modeling, problem-solving, planning, reflection, and research. Tasks should measure these abilities directly as they will be used in the real world, rather than through a remote proxy.
 <p>Standards Alignment</p>	Regarding content and performance standards, assessments should be rigorous in terms of the content and tasks they present, as well as the level of performance they expect.
 <p>Use of Instructionally Sensitive and Educationally Valuable Items</p>	Assessment tasks should be designed so that the underlying concepts can be taught and learned, rather than reflecting students' differential access to outside-of-school experiences—frequently associated with their socioeconomic status or cultural context—or depending on tricky interpretations that mostly reflect test-taking skills. Preparing for and completing assessments should engage students in instructionally valuable activities, and assessment results should provide useful information to teachers, students, and families to guide educational programming and the provision of supplemental supports.
 <p>Validity, Reliability, and Fairness</p>	To be truly valid for a wide range of learners, assessments should measure what they purport to measure, accurately evaluate students' abilities, and do so reliably across testing contexts and scorers. They should also be unbiased, accessible, and used in ways that support positive outcomes for students and overall instructional quality.

Source: Educational Policy Improvement Center and Stanford Center for Opportunity Policy in Education, Stanford University⁴⁷

Another key area that teachers should consider is ensuring that assessments are fair and responsive to students' individual learning needs and exceptionalities.⁴⁸ Fairness means that students are given equitable opportunities to display their learning via assessment tasks and items that are culturally-responsive, unbiased, and adaptable to incorporate accommodations and modifications for specialized student populations (e.g., English language learners, students with disabilities).⁴⁹ To promote fair assessment, teachers can:⁵⁰

- Be flexible by using a range of methods to respond to the diversity in the student body and by providing opportunities for students to express their learning in different modes and modalities;
- Be clear about their learning objectives and ensure that students understand how the assessment will measure their progress toward those objectives;

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- Be creative, utilize a variety of assessment methods to measure student performance, and, where possible, use multiple measures;
- Be concerned with the needs of individual students as well as broader applicability to all students in foundational assessment design; and
- Be holistic and remember that fair and inclusive assessment occurs before, during, and after learning, with frequent provision of targeted feedback.

Classroom Assessment Domains and Standards







	STANDARD	EXPLANATION
FOUNDATIONS	Assessment Purpose	Classroom assessment practices should have a clear purpose that supports teaching and learning.
	Learning Expectations	Learning expectations should form the foundation for aligning classroom assessment practices with appropriate instruction and learning opportunities for each student.
	Assessment Design	The types and methods of classroom assessment should clearly allow students to demonstrate their learning.
	Student Engagement in Assessment	Students should be meaningfully engaged in the assessment process and use of the assessment evidence to enhance their learning.
	Assessment Preparation	Adequate teacher and student preparation in terms of resources, time, and learning opportunities should be part of classroom assessment practices.
	Informed Students and Families	The purposes and uses of classroom assessment should be communicated to students and, when appropriate, parents and guardians.
USE	Analysis of Student Performance	The methods for analyzing evidence of student learning should be appropriate for the assessment purpose and practice.
	Effective Feedback	Classroom assessment practices should provide timely and useful feedback to improve student learning.
	Instructional Follow-Up	Analysis of student performance should inform instructional planning and next steps to support ongoing student learning.
	Grades and Summary Comments	Summative grades and comments should reflect student achievement of the learning expectations.
	Reporting	Assessment reports should be based on a sufficient body of evidence and provide a summary of a student's learning in a clear, timely, accurate, and useful manner.
QUALITY	Cultural and Linguistic Diversity	Classroom assessment practices should be responsive to and respectful of the cultural and linguistic diversity of students and their communities.
	Exceptionality and Special Education	Classroom assessment practices should be appropriately differentiated to meet the specific educational needs of all students.
	Unbiased and Fair Assessment	Classroom assessment practices and subsequent decisions should be free from all factors unrelated to the intended purposes of the assessment.
	Reliability and Validity	Classroom assessment practices should provide consistent, dependable, and appropriate information that supports sound interpretations and decisions about each student's knowledge and skills.
	Reflection	Classroom assessment practices should be monitored and revised to improve their overall quality.

Source: National Council on Measurement in Education and Joint Committee on Standards for Educational Evaluation⁵¹

Fairness in assessment practices implies that all students will have equitable opportunities to display their skills and knowledge without any undue burden resulting from their socioeconomic, cultural, racial, or ethnic background, their language status, or their disability status.⁵² As such, teachers should consider ways to broaden students' abilities to successfully display their knowledge and skills by applying universal design principles to the base construction of assessment tasks.⁵³

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ADHERE TO EFFECTIVE DESIGN FEATURES

Principles of Inclusive Assessment

-  All students participate in accountability and classroom assessments.
-  Assessments allow all students to demonstrate their learning on the same challenging content.
-  High-quality decision making determines how students participate in assessments.
-  Implementation fidelity ensures fair and valid interpretations of assessment results.
-  Public reporting content and formats include the assessment results of all students.
-  Continuous improvement, monitoring, and training ensure the quality of the overall system.

Source: National Center on Educational Outcomes, University of Minnesota⁵⁷

Assessment “is not about ability of the student to figure out unusual formats or response methods or[...]interpret language,” and teachers should actively look for assessment design features that may inhibit students’ ability to understand and complete outlined tasks with fidelity.⁵⁴ At the same time, teachers should provide accommodations or modify assessments as necessary to address students’ needs as specified in individualized education programs (IEPs), Section 504 plans, English language learning plans, and other learning plans for students with specialized needs.⁵⁵

The [Checklist for Universal Assessment Design](#) on p. 17 presents criteria that teachers can use to ensure that classroom assessments maximize access in their base design. Adhering to listed criteria will also ease the process of embedding accommodations or making modifications for those students requiring them.

Notably, many of the preceding design features apply in both brick-and-mortar and virtual or remote settings, though “there are differences between the two modalities that must be taken into account.”⁵⁷ When delivering virtual or remote assessments, teachers should continue to deploy multiple formative and summative task types to engage students and measure learning.⁵⁸ However, teachers should also recognize that virtual and remote learning will necessitate adaptation of assessment strategies to available digital applications. They must also accept that certain expectations of brick-and-mortar assessments (e.g., no or limited access to reference materials, restrictions on collaboration) may need to be relaxed.⁵⁹

As such, teachers should consider how to balance and embed formative and summative assessments within both synchronous (i.e., real-time) and asynchronous (i.e., unsupervised, independent) learning time. This can be achieved through a combination of peer assessments, independent and collaborative projects, and adapted assessment tasks (e.g., written responses posted to discussion boards, student video-recordings of their application of a given skill).⁶⁰

Sample Synchronous and Asynchronous Assessment Strategies by Purpose

PURPOSE	DESCRIPTION	SAMPLE ASSESSMENT STRATEGIES
Clarification	Determining what students will learn and how they will know they have learned it	<u>Synchronous</u> : Having students restate the learning goal and success criteria in their own words verbally, in writing, or during a think-pair-share occurring in a web-conference breakout room
		<u>Asynchronous</u> : Having students restate the learning goal and success criteria on a discussion board or in an online journal
Elicitation	Generating evidence of student learning	<u>Synchronous</u> : Asking students in-the-moment questions necessitating verbal responses, use of polling tools, or written responses in a chat room
		<u>Asynchronous</u> : Having students respond to online discussion forum prompts, complete online quizzes, or engage in a collaborative digital work project

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PURPOSE	DESCRIPTION	SAMPLE ASSESSMENT STRATEGIES
Interpretation	Reviewing evidence of student learning to determine progress	<p><u>Synchronous</u>: Live one-to-one or group meetings with students to review work-in-progress or completed assessment tasks</p> <p><u>Asynchronous</u>: Providing commentary to student work products using online scoring rubrics or embedded commentary features of word processing and content creation software</p>
Action	Adjusting instruction to address gaps in student learning	<p><u>Synchronous</u>: Live peer review of assessment tasks in breakout rooms or provision of additional supports (e.g., a supplemental video) to support access and understanding</p> <p><u>Asynchronous</u>: Presentation of additional resources or tools to help students manage multiple assessment components (e.g., online calendar)</p>

Source: Smarter Balanced Assessment Consortium⁶¹

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ADHERE TO EFFECTIVE DESIGN FEATURES

List activities that you can implement **during instruction** to address the knowledge and/or skills embedded in the standard(s). Then, rate each item based on how closely it matches the standard(s) in terms of knowledge, skills, and complexity.

Activity:

To what extent is there a match between the activity and the standard(s)?

- Activity fully addresses skills and/or knowledge described in standard(s)
- Activity partially addresses skills and/or knowledge described in standard(s)
- Activity does not address skills and/or knowledge described in standard(s)

To what extent does the activity's cognitive rigor match that of the standard(s)?

- Activity challenges students at a higher level of complexity than that indicated by standard(s)
- Activity challenges students at a similar level of complexity to that indicated by standard(s)
- Activity challenges students at a lower level of complexity than that indicated by standard(s)

Activity:

To what extent is there a match between the activity and the standard(s)?

- Activity fully addresses skills and/or knowledge described in standard(s)
- Activity partially addresses skills and/or knowledge described in standard(s)
- Activity does not address skills and/or knowledge described in standard(s)

To what extent does the activity's cognitive rigor match that of the standard(s)?

- Activity challenges students at a higher level of complexity than that indicated by standard(s)
- Activity challenges students at a similar level of complexity to that indicated by standard(s)
- Activity challenges students at a lower level of complexity than that indicated by standard(s)

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ADHERE TO EFFECTIVE DESIGN FEATURES

List tasks that you can **embed in formative or summative assessments** to address the knowledge and skills within the standards. Then, rate each task based on how closely it matches the standard(s) in terms of knowledge, skills, and complexity.

Task:

To what extent is there a match between the task and the standard(s)?

- Task fully addresses skills and/or knowledge described in standard(s)
- Task partially addresses skills and/or knowledge described in standard(s)
- Task does not address skills and/or knowledge described in standard(s)

To what extent does the task's cognitive rigor match that of the standard(s)?

- Task challenges students at a higher level of complexity than that indicated by standard(s)
- Task challenges students at a similar level of complexity to that indicated by standard(s)
- Task challenges students at a lower level of complexity than that indicated by standard(s)

Task:

To what extent is there a match between the task and the standard(s)?

- Task fully addresses skills and/or knowledge described in standard(s)
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- Task does not address skills and/or knowledge described in standard(s)

To what extent does the task's cognitive rigor match that of the standard(s)?

- Task challenges students at a higher level of complexity than that indicated by standard(s)
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- Task challenges students at a lower level of complexity than that indicated by standard(s)

Source: Rhode Island Department of Education and National Center for the Improvement of Educational Assessment⁶²

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ADHERE TO EFFECTIVE DESIGN FEATURES



Checklist for Universal Assessment Design

Directions: Use this checklist to determine how well classroom assessments adhere to universal design principles and promote equitable access and opportunities for students from diverse backgrounds and with different learning needs.

<u>Criteria for Consideration</u>	<u>Yes</u>	<u>No</u>
Do the assessment tasks and items reflect the intended standards?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment test or measure skills and knowledge beyond those embedded in the intended content standards?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment content and task construction respect diversity in student identities (e.g., gender, race, socioeconomic status)?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment avoid content or language that may unfairly advantage or disadvantage any student sub-group?	<input type="checkbox"/>	<input type="checkbox"/>
Is the formatting of the assessment's <i>written</i> components (e.g., directions) clear and logical?	<input type="checkbox"/>	<input type="checkbox"/>
Is the formatting of the assessment's <i>visual</i> components (e.g., graphs) logical and presented with sufficient detail?	<input type="checkbox"/>	<input type="checkbox"/>
Do the overall aesthetics of the assessment (e.g., use of white space, placement of assessment features, coloring) promote ease of access?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment allow for changes in format (e.g., conversion to digital format) without changing its content or difficulty?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment facilitate the application of <i>presentation</i> accommodations and modifications (e.g., oral reading of directions)?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment facilitate the application of <i>response</i> accommodations and modifications (e.g., assistive technology)?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment facilitate the application of <i>timing</i> or <i>scheduling</i> accommodations and modifications (e.g., extra time,)?	<input type="checkbox"/>	<input type="checkbox"/>
Does the assessment facilitate the application of <i>setting</i> accommodations and modifications (e.g., resource room)?	<input type="checkbox"/>	<input type="checkbox"/>
Do students have input regarding the types of assessment items they will encounter and complete?	<input type="checkbox"/>	<input type="checkbox"/>
Do students have a choice regarding the products and procedures they will use to complete the assessment?	<input type="checkbox"/>	<input type="checkbox"/>

Source: National Center on Educational Outcomes, University of Minnesota, and University of Kansas⁶³

USE ASSESSMENT DATA TO DRIVE IMPROVEMENT

Assessments should provide teachers, students, and families with actionable data about students' performance relative to standards and their peers and about the effectiveness of corresponding instruction.⁶⁴ Indeed, teachers should leverage assessments to gain insights about students' level of proficiency or mastery for target standards and to identify aspects of their curricula and instruction which do and do not have positive impacts on learning.⁶⁵ Moreover, teachers should educate students and families on interpreting assessment data.⁶⁶

Assessment Questions by Stakeholder

- ❓ **Teachers:** How are students currently performing relative to standards, grade-level expectations, and their peers? What adjustments must be made to instruction based on this performance?
- ❓ **Students:** How well am I performing in achieving proficiency or mastery of target skills and knowledge? Am I having difficulty with specific content? What supports do I need to address these difficulties?
- ❓ **Parents/Guardians:** Is my child performing at, above, or below established expectations and standards, and how do they compare to their grade-level peers? Is their current educational program meeting their needs? What interventions or services might they require to address gaps?

Source: Northwest Evaluation Association⁶⁷

Importantly, teachers should recognize that different assessment types have varying applications.⁶⁸ In particular, the timing of an assessment and the nature of the generated feedback will produce different information that will have specific degrees of utility.⁶⁹ For example, self-assessment will likely be formative in nature and will give students an idea of their progress relative to their own expectations. Comparatively, teacher feedback can be either formative or summative in evaluating students' precise strengths and areas for development relative to standards.⁷⁰

Assessment Timing and Data Uses

DIAGNOSTIC OR PRE-ASSESSMENTS

Administered prior to instruction, these assessments give teachers data about students' existing knowledge to guide planning to address gaps and avoid repeating unnecessary content. Students and families will acquire an awareness about student performance on the target content prior to receiving instruction, which will guide progress monitoring.



INTERIM OR FORMATIVE ASSESSMENTS

Administered during an instructional sequence, these assessments give teachers data on students' progress relative to initial performance and target proficiency and mastery criteria. This will help teachers determine the need for re-teaching, interventions, or enrichment. Students and their families will become more aware of persisting deficits in skills and knowledge and emerging aptitudes related to target standards. In addition, they will be able to determine whether instruction has been effective and to offer suggestions to teachers on how better support students.



SUMMATIVE OR POST-ASSESSMENTS

Administered at the conclusion of an instructional sequence, these assessments offer a final determination of whether students have met, exceeded, or failed to meet a given standard or set of standards. Teachers can use this data to improve future iterations of the corresponding instruction in successive school years, and they can leverage the data to determine if students carry additional needs into subsequent units and lessons. Summative data can also inform referrals to tiered interventions. Relatedly, students and families can use the data to determine the students' level of content and skills mastery, as well as the need for additional services and supports.

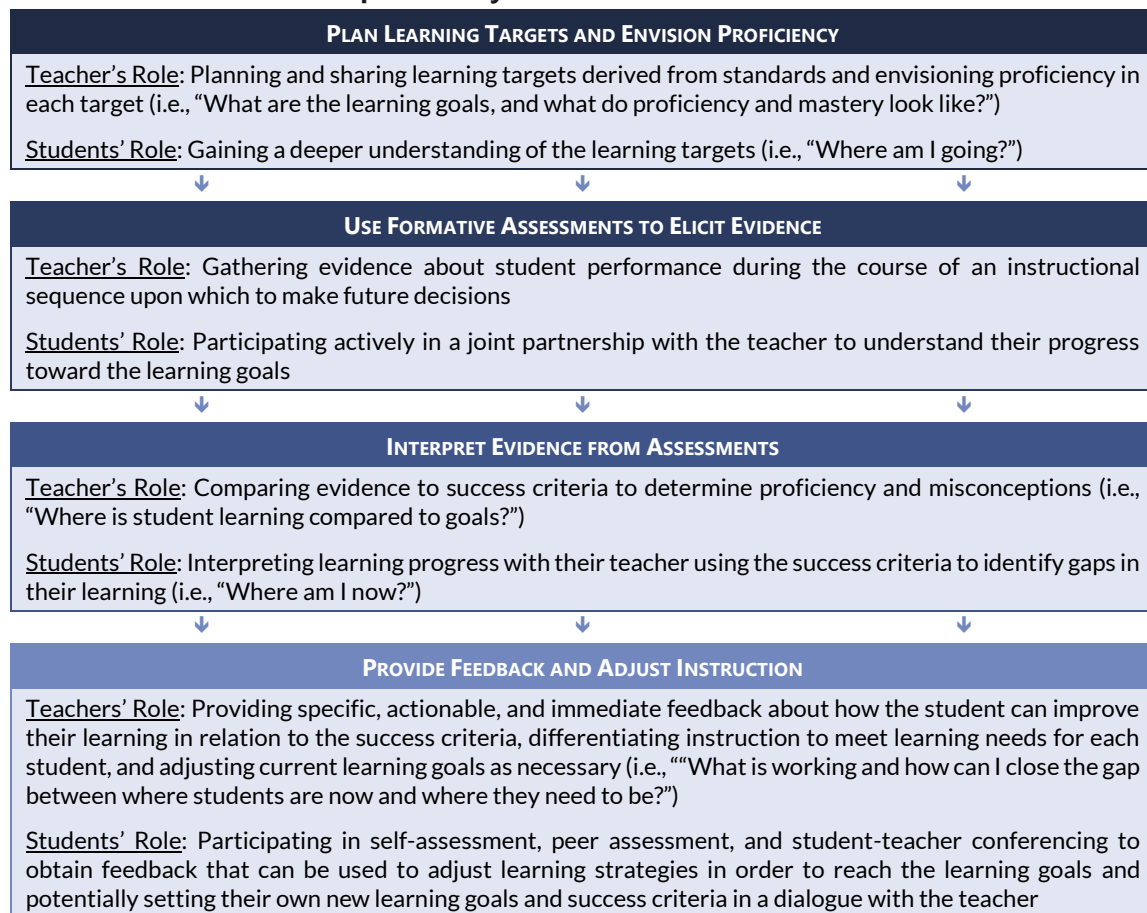
Source: Learning Accelerator and Intel Corporation⁷¹

Notably, teachers can use data from assessments as a tool to better differentiate instruction for individual students or to make larger curriculum changes.⁷² This includes actions such as “[a]djusting a classroom’s scope and sequence or the order

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and timing with which skills are introduced to students “in cases where an entire class shows evidence of lower- or higher-than-expected proficiency on a diagnostic or formative assessment.”⁷³ Likewise, diagnostic and formative assessment data can guide teachers in identifying individual students in need of remediation and interventions—in the case of struggling students—as well as high-performing students who would benefit from acceleration or enrichment.⁷⁴ Most importantly, teachers should leverage assessment data “to identify the strengths and weaknesses of an entire class as well as individual students,” which will help them adjust instruction to address knowledge and skills gaps which may require further attention and extend content into deeper strata of learning when possible.⁷⁵

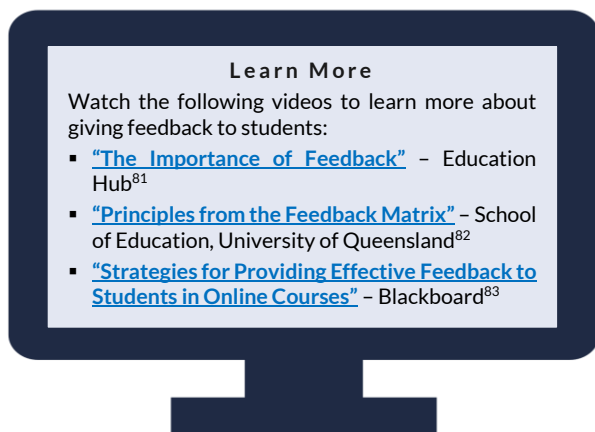
The Reciprocal Cycle of Assessment and Instruction



Source: Wisconsin Department of Public Instruction and Institute for Science + Math Education, University of Washington⁷⁶

Alongside their own efforts to differentiate instruction to better support students, **teachers should provide actionable feedback and guidance to students on how to examine their own assessment data and progress and assume shared responsibility for reaching target performance levels.**⁷⁷ Teacher feedback on all assessments should be precise in their descriptiveness and tie directly into the outlined performance criteria to allow students to acquire a clear understanding of their current knowledge and skills versus the target performance level.⁷⁸ Relatedly, teachers should provide students with explicit instructions and practice on how to interpret descriptive feedback and raw assessment data to self-assess their progress relative to peers and target standards, set goals for progress, and seek additional

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support and enrichment.⁷⁹ These efforts can also encompass distribution of tools to help students examine assessment data and feedback, such as the [Student Self-Assessment Form](#) located on the next page.⁸⁰

Likewise, teachers should educate parents and guardians about the broader purposes of formative and summative assessments and communicate with families about individual assessments and student performance on those assessments.⁸⁴ Indeed, school-to-home

collaboration around assessment is vital to establish and maintain partnerships between teachers and families that support shared knowledge of students’ strengths and weaknesses and guide cooperative action to address students’ needs.⁸⁵ Such collaboration should emphasize:⁸⁶

- The purpose of each assessment;
- What assessment types are used in the classroom and how they differ;
- Students’ learning progress, as indicated by assessment results;
- The academic strengths and weaknesses of each child;
- What the teacher and parents or guardians can do to address weaknesses and support additional growth for areas of strength; and
- The assessment process and how it impacts the teaching and learning process.



Student Self-Assessment Form

Directions: Use the following form with students during one-to-one conferences or for their independent use to support their ability to interpret assessment data, understand peer and teacher feedback, and create a plan to address that feedback.

Name:

Assessment:

Based on your assessment score and/or the feedback you received—as specified in the assessment rubric and via written or verbal feedback from teachers and/or your peers—what are your strengths? What are your areas for development?

Strengths:

Areas for Development:

What is your plan to build on areas that you consider strengths and to improve in areas that may require further development?

Source: *Educational Leadership*^{B7}

ENDNOTES

- ¹ “Utah Effective Teaching Standards.” Utah State Board of Education, August 2013. p. xi. <https://www.schools.utah.gov/file/f0e86540-5617-4166-a701-fea403f2f848>
- ² Figure contents quoted verbatim, with minor adaptations, from: “Utah Effective Teaching Standards and Indicators.” Utah State Board of Education, 2013. pp. 1–3. <https://www.schools.utah.gov/file/7313cfe5-5e68-41ef-9de4-03e5a9d395d8>
- ³ Oppen, I.M. “Teachers Matter: Understanding Teachers’ Impact on Student Achievement.” RAND Corporation, RAND Corporation, 2019. p. 1. https://www.rand.org/pubs/research_reports/RR4312.html
- ⁴ [1] Guadalupe, C. “Teachers as Primary Agents of Educational Systems.” Canadian Foundation for the Americas. <https://www.focal.ca/en/publications/focalpoint/259-june-2010-cesar-guadalupe-en> [2] “Effective Teachers Are the Most Important Factor Contributing to Student Achievement.” Educational Research Newsletter and Webinars, September 2003. <https://www.ernweb.com/educational-research-articles/effective-teachers-are-the-most-important-factor-contributing-to-student-achievement/> [3] Terada, Y. “Understanding a Teacher’s Long-Term Impact.” Edutopia | George Lucas Educational Foundation, February 4, 2019. <https://www.edutopia.org/article/understanding-teachers-long-term-impact>
- ⁵ [1] Haycock, K. “Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap.” The Education Trust, 1998. pp. 3–10. https://images.pearsonassessments.com/images/NES_Publications/1999_04Haycok_397_1.pdf [2] Tucker, P.D. and J.H. Stronge. “Linking Teacher Evaluation and Student Learning, Chapter 1. The Power of an Effective Teacher and Why We Should Assess It.” Association for Supervision and Curriculum Development, April 2005. <http://www.ascd.org/publications/books/104136/chapters/The-Power-of-an-Effective-Teacher-and-Why-We-Should-Assess-It.aspx> [3] Liu, J. and S. Loeb. “Engaging Teachers: Measuring the Impact of Teachers on Student Attendance in Secondary School.” Stanford Center for Education Policy Analysis, January 2017. pp. 1–2, 5. <https://cepa.stanford.edu/sites/default/files/wp17-01-v201701.pdf> [4] Tornio, S. “12 Powerful Statistics That Prove Why Teachers Matter.” WeAreTeachers, May 15, 2019. <https://www.weareteachers.com/teacher-impact-statistics/> [5] Hanushek, E.A. “Valuing Teachers.” *Education Next*, 2011. pp. 42–43. <http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%202011%20EdNext%201%283%29.pdf> [6] Chetty, R., J.N. Friedman, and J.E. Rockoff. “The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood.” National Bureau of Economic Research, December 2011. p. ii. <http://www.nber.org/papers/w17699.pdf> [7] Chetty, R., J.N. Friedman, and J.E. Rockoff. “Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood.” National Bureau of Economic Research, September 2013. p. ii. <https://www.nber.org/papers/w19424.pdf> [8] Blazar, D. and M.A. Kraft. “Teacher and Teaching Effects on Students’ Attitudes and Behaviors.” *Educational Evaluation and Policy Analysis*, 39:1, March 2017. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5602565/> [9] Jackson, C.K. “Teachers’ Impact on Student Behavior Matters More for Student Success Than Their Impact on Test Scores.” *Education Next*, 19:1, 2019. <https://www.educationnext.org/teachers-impact-student-behavior-matters-student-success-impact-test-scores/>
- ⁶ Figure contents quoted verbatim, with minor adaptations, from: Stronge, J.H. “Qualities of Effective Teachers, 3rd Edition, Chapter 1. Qualities of Effective Teachers: An Introduction.” Association for Supervision and Curriculum Development, March 2018. <http://www.ascd.org/publications/books/118042/chapters/Qualities-of-Effective-Teachers@-An-Introduction.aspx>
- ⁷ Ibid.
- ⁸ [1] Sacks, A. “What Makes a Great Teacher: Pedagogy or Personality?” Education Week, September 25, 2019. <https://www.edweek.org/tm/articles/2019/09/25/what-makes-a-great-teacher-pedagogy-or.html> [2] Hasset, M.F. “What Makes a Good Teacher?” Rowan University. pp. 2–4. <http://users.rowan.edu/~levy/What%20Makes%20A%20Good%20Teacher.pdf>
- ⁹ [1] “Top Qualities of an Effective Teacher.” Center for New Designs in Learning and Scholarship, Georgetown University. <https://cndls.georgetown.edu/atprogram/twl/effective-teacher/> [2] Goldberg, M.F. “Keeping Good Teachers, Chapter 26. The Qualities of Great Teachers.” Association for Supervision and Curriculum Development, 2003. <http://www.ascd.org/publications/books/104138/chapters/The-Qualities-of-Great-Teachers.aspx>
- ¹⁰ Figure contents quoted verbatim, with minor adaptations, from: “Utah Effective Teaching Standards,” Op. cit., pp. 14–15.
- ¹¹ [1] Lynch, M. “The Real Purpose of Assessments in Education.” The Edvocate, September 10, 2016. <https://www.theedadvocate.org/real-purpose-assessments-education/> [2] Fisher, Jr., M.R.

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ENDNOTES

“Student Assessment in Teaching and Learning.” Vanderbilt University.
<https://cft.vanderbilt.edu/student-assessment-in-teaching-and-learning/>

¹² [1] “The Functions of Assessment: Varieties of Assessment.” Science Education Resource Center, Carleton College, May 7, 2018. <https://serc.carleton.edu/introgeo/assessment/function.html> [2] Sparks, S.D. and L. Cooper. “Types of Assessments: A Head-to-Head Comparison.” Education Week, November 9, 2015. <https://www.edweek.org/ew/section/multimedia/types-of-assessments-a-head-to-head-comparison.html>

¹³ [1] Woods, J.R. “Assessments 101: A Policymaker’s Guide to K-12 Assessments.” Education Commission of the States, 2017. https://www.ecs.org/wp-content/uploads/Assessments-101_A-policymakers-guide-to-K-12-assessments.pdf [2] “Interim Assessment.” Glossary of Education Reform | Great Schools Partnership, October 30, 2013. <https://www.edglossary.org/interim-assessment/> [3] “Formative Assessment.” Glossary of Education Reform | Great Schools Partnership, April 29, 2014. <https://www.edglossary.org/formative-assessment/>

¹⁴ [1] “What Is the Difference Between Formative and Summative Assessment?” Eberly Center for Teaching Excellence and Educational Innovation, Carnegie Mellon University. <https://www.cmu.edu/teaching/assessment/basics/formative-summative.html> [2] “What Are Summative Assessments?” Assessment Learning Network, Michigan Assessment Consortium, May 2019. pp. 1–2. https://www.michiganassessmentconsortium.org/wp-content/uploads/2019_May_WHAT-ARE-SUMMATIVE-ASSESSMENTS3.pdf [3] “Summative Assessment.” The Wing Institute. <https://www.winginstitute.org/assessment-summative>

¹⁵ Figure contents quoted verbatim, with minor adaptations, from: “Assessment.” Glossary of Education Reform | Great Schools Partnership, November 10, 2015. <https://www.edglossary.org/assessment/>

¹⁶ [1] Dubec, R. “Assessment For, As, and Of Learning.” Centre for Innovation and Excellence in Learning, Lakehead University, December 18, 2019. <https://teachingcommons.lakeheadu.ca/assessment-and-learning> [2] Bennett, J. “Assessment FOR Learning vs. Assessment OF Learning.” Pearson, December 8, 2017. <https://www.pearsonassessments.com/professional-assessments/blog-webinars/blog/2017/12/assessment-for-learning-vs--assessment-of-learning.html>

¹⁷ [1] “Summative Assessment.” Glossary of Education Reform | Great Schools Partnership, August 29, 2013. <https://www.edglossary.org/summative-assessment/> [2] Heick, T. “The Difference Between Assessment Of Learning And Assessment For Learning -.” TeachThought, December 12, 2019. <https://www.teachthought.com/pedagogy/the-difference-between-assessment-of-learning-and-assessment-for-learning/> [3] “Types of Summative Assessment.” Center for Educational Innovation, University at Buffalo. <http://www.buffalo.edu/ubcei/enhance/designing/assessment/summative/types-of-summative-assessment.html>

¹⁸ “Understanding Formative, Interim and Summative Assessments in the Classroom.” Ohio Department of Education. p. 2. https://education.ohio.gov/getattachment/Topics/Testing/Ohios-State-Test-in-ELA-Math-Science-SocialStudies/Ohio-Integrating-Formative-and-Summative_Accessible-5-18-20-jh.pdf.aspx?lang=en-US

¹⁹ “Module 1: Types of Assessments.” Michigan Virtual and Michigan Department of Education, January 4, 2017. <https://www.youtube.com/watch?v=0xQKPz0zDL8>

²⁰ “Formative Assessments: Why, When, and Top 5 Examples.” Teachings in Education, November 14, 2016. <https://www.youtube.com/watch?v=-RXYTpgvB5I>

²¹ “Summative Assessment: Overview and Examples.” Teachings in Education, January 16, 2017. <https://www.youtube.com/watch?v=SjnrI3ZO2tU>

²² [1] “How Assessment Improves Learning.” Educational Data Systems, March 1, 2018. <https://eddata.com/2018/03/assessment-improves-learning/> [2] Dodge, J. “What Are Formative Assessments and Why Should We Use Them? | Scholastic.” Scholastic. <http://www.scholastic.com/teachers/articles/teaching-content/what-are-formative-assessments-and-why-should-we-use-them/>

²³ [1] Brookhart, S.M. “Formative Assessment Strategies for Every Classroom: An ASCD Action Tool, 2nd Edition. Section 1: What Is Formative Assessment?” Association for Supervision and Curriculum Development, July 2010. <http://www.ascd.org/publications/books/111005/chapters/Section-1@-What-Is-Formative-Assessment%C2%A2.aspx> [2] Steele, A. “What Is Assessment for Learning and What Are the Benefits?” Brighter Thinking Blog | Cambridge University Press, July 2, 2019. <https://www.cambridge.org/us/education/blog/2019/07/02/what-assessment-learning-and-what-are-benefits/>

²⁴ [1] “Formative and Summative Assessments.” Poorvu Center for Teaching and Learning, Yale University. <https://poorvucenter.yale.edu/Formative-Summative-Assessments> [2] Marion, S. “Five Essential Features of Assessment for Learning.” National Center for the Improvement of

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ENDNOTES

Educational Assessment, March 21, 2019. <https://www.nciea.org/blog/innovative-assessment/five-essential-features-assessment-learning>

²⁵ “Revising the Definition of Formative Assessment.” Formative Assessment for Students and Teachers (FAST) State Collaborative on Assessment and Student Standards, Council of Chief State School Officers, 2018. pp. 2–4. <https://ccsso.org/sites/default/files/2018-06/Revising%20the%20Definition%20of%20Formative%20Assessment.pdf>

²⁶ Figure contents quoted verbatim, with minor adaptations, from: Dubec, Op. cit.

²⁷ [1] “6 Types of Assessment of Learning.” TeachThought, August 31, 2020. <https://www.teachthought.com/pedagogy/6-types-assessment-learning/> [2] Lynch, Op. cit.

²⁸ [1] “The 4 W’s of Assessment.” Michigan Department of Education. pp. 1–3. https://www.michigan.gov/documents/mde/Assessment_charts_498691_7.pdf [2] Sparks and Cooper, Op. cit.

²⁹ [1] “4 Formative Assessment Practices That Make a Difference in Classrooms.” Northwest Evaluation Association, March 2016. p. 3. <https://www.nwea.org/content/uploads/2016/04/4-Formative-Assessment-Practices-that-Make-a-Difference-in-Classrooms.pdf> [2] “Engaging Families as Assessment Partners.” Early Childhood Technical Assistance Center, University of North Carolina at Chapel Hill, 2017. https://ectacenter.org/~pdfs/decrp/PG_Asm_EngagingFamiliesasAssessmentPartners_prac_print_2017.pdf

³⁰ [1] “Assessment, Section 4: Measuring for Learning.” Office of Educational Technology, U.S. Department of Education. <https://tech.ed.gov/netp/assessment/> [2] Brookhart, “How to Make Decisions with Different Kinds of Student Assessment Data, Chapter 1. An Introduction to Different Kinds of Data,” Op. cit.

³¹ [1] “Common Assessment Terms.” Eberly Center for Teaching Excellence and Educational Innovation, Carnegie Mellon University. <https://www.cmu.edu/teaching/assessment/basics/glossary.html> [2] “Types of Assessment.” Association for Supervision and Curriculum Development, 2012. pp. 1–4. https://pdo.ascd.org/lmscourses/PD11OC117/media/DI-Assessment_M1_Reading_Assessment.pdf

³² Figure contents quoted verbatim, with minor adaptations, from: Brookhart, S.M. “How to Make Decisions with Different Kinds of Student Assessment Data, Chapter 1. An Introduction to Different Kinds of Data.” Association for Supervision and Curriculum Development, December 2015. <http://www.ascd.org/publications/books/116003/chapters/An-Introduction-to-Different-Kinds-of-Data.aspx>

³³ [1] Lewis, B. “Teachers Should Design Student Assessments. But First They Need to Learn How.” Education Week, July 18, 2019. <https://www.edweek.org/ew/articles/2019/07/19/teachers-should-design-student-assessments-but-first.html> [2] Aviles, N. and K. Grayson. “Backward Planning – How Assessment Impacts Teaching and Learning.” Intercultural Development Research Association, August 2017. <https://www.idra.org/resource-center/backward-planning-assessment-impacts-teaching-learning/> [3] Patel, N.H. and D.L. Herick. “Ensuring Valid, Effective, Rigorous Assessments.” Association for Middle Level Education, January 2016. <https://www.amle.org/BrowsebyTopic/WhatsNew/WNDet/TabId/270/ArtMID/888/ArticleID/570/Ensuring-Valid-Effective-Rigorous-Assessments.aspx>

³⁴ [1] Maypole, M. “6 Tips for Creating Powerful Assessments for Your Students.” Getting Smart, May 27, 2017. <https://www.gettingsmart.com/2017/05/6-tips-for-creating-powerful-assessments-for-your-students/> [2] DePascale, C. “Alignment Turns 25 This Year—So Now We Ask, What Are Its Prospects?” National Center for the Improvement of Educational Assessment, February 14, 2019. <https://www.nciea.org/blog/alignment-turns-25-year-so-now-we-ask-what-are-its-prospects>

³⁵ [1] “Teaching Handbook: Assessment Strategies.” Western Washington University, September 18, 2020. https://www.wvu.edu/teachinghandbook/course_design/assessment_strategies.shtml [2] Sigman, D. and M. Mancuso. “Designing a Comprehensive Assessment System.” WestEd, 2017. pp. 5–8. <https://www.wested.org/wp-content/uploads/2017/03/resource-designing-a-comprehensive-assessment-system.pdf>

³⁶ Figure adapted from: “Why Should Assessments, Learning Objectives, and Instructional Strategies Be Aligned?” Eberly Center for Teaching Excellence and Educational Innovation, Carnegie Mellon University. <https://www.cmu.edu/teaching/assessment/basics/alignment.html>

³⁷ [1] “Guidance for Developing and Selecting Quality Assessments in the Secondary Classroom.” Rhode Island Department of Education and National Center for the Improvement of Educational Assessment. pp. 2, 4, 6, 8. <https://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Evaluation/Online-Modules/Quality-Assessments-Secondary.pdf> [2] “Module 1: Learning Assessment and Alignment, Course Alignment.” Center for Faculty Development, University of Colorado, 2007. https://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/Documents/Tutorials/Assessment/module1/course_alignment.htm

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ENDNOTES

³⁸ [1] "Aligning Assessments with Learning Outcomes." Center for Teaching and Learning, Brigham Young University. <https://ctl.byu.edu/aligning-assessments-learning-outcomes> [2] "Use Bloom's Taxonomy to Align Assessments." Delphi Center for Teaching and Learning, University of Louisville. <https://louisville.edu/delphi/resources/-/files/resources/pages/Blooms-Taxonomy-Handout.pdf> [3] "Why Should Assessments, Learning Objectives, and Instructional Strategies Be Aligned?," Op. cit.

³⁹ Bulleted text adapted from: Shepard, L.A. et al. "Classroom Assessment Principles to Support Teaching and Learning." Center for Assessment, Design, Research, and Evaluation, University of Colorado at Boulder, and National Center for the Improvement of Educational Assessment, February 2020. pp. 4-8. https://www.colorado.edu/cadre/sites/default/files/attached-files/classroom_assessment_principles_to_support_teaching_and_learning_-_final_0.pdf

⁴⁰ "Guidelines for Assessing Student Learning." Harriet W. Sheridan Center for Teaching and Learning, Brown University. <https://www.brown.edu/sheridan/teaching-learning-resources/teaching-resources/course-design/classroom-assessment/guidelines>

⁴¹ [1] McMillan, S.M. "Four Steps to Quality Classroom Assessments." Educational Data Systems, August 26, 2019. <https://eddata.com/2019/08/four-steps-to-quality-classroom-assessments/> [2] "Guidelines for Creating Rubrics." *ASCD Education Update*, 55:8, August 2013. <http://www.ascd.org/publications/newsletters/education-update/aug13/vol55/num08/Guidelines-for-Creating-Rubrics.aspx> [3] "Creating and Using Rubrics." Assessment and Curriculum Support Center, University of Hawai'i at Manoa. <https://manoa.hawaii.edu/assessment/resources/creating-and-using-rubrics/>

⁴² Bulleted text adapted from: "Design Assessment: Designing Assessment." Center for Teaching and Learning, University of California at Berkeley. <https://teaching.berkeley.edu/resources/assessment-and-evaluation/design-assessment>

⁴³ [1] "Why Reliability and Validity Are Important to Learning Assessment." Center for Learning Experimentation, Application, and Research, University of North Texas. <https://teachingcommons.unt.edu/teaching-essentials/assessment/why-reliability-and-validity-are-important-learning-assessment> [2] "Importance of Validity and Reliability in Classroom Assessments." The Graide Network, September 10, 2018. <https://www.thegraidenetwork.com/blog-all/2018/8/1/the-two-keys-to-quality-testing-reliability-and-validity>

⁴⁴ "Valid and Reliable Assessments." Center on Standards and Assessment Implementation, WestEd and National Center for Research on Evaluation, Standards, and Student Testing, March 2018. pp. 1-2. <https://files.eric.ed.gov/fulltext/ED588476.pdf>

⁴⁵ [1] "Considering Validity in Assessment Design." Poorvu Center for Teaching and Learning, Yale University. <https://poorvucenter.yale.edu/AssessmentDesignValidity> [2] "Developing Reliable Student Assessments." Poorvu Center for Teaching and Learning, Yale University. <https://poorvucenter.yale.edu/ReliableAssessments>

⁴⁶ "Linking Classroom Assessment with Student Learning." Educational Testing Service, 2003. pp. 1-7, 10-11, 15-16. https://www.ets.org/Media/Tests/TOEFL_Institutional_Testing_Program/ELLM2002.pdf

⁴⁷ Figure contents quoted verbatim, with minor adaptations, from: Conley, D.T. and L. Darling-Hammond. "Creating Systems of Assessment for Deeper Learning." Educational Policy Improvement Center and Stanford Center for Opportunity Policy in Education, Stanford University, 2013. pp. 16-17. https://edpolicy.stanford.edu/sites/default/files/publications/creating-systems-assessment-deeper-learning_0.pdf

⁴⁸ [1] "Fairness (in Assessment)." International Bureau of Education, United Nations Educational, Scientific, and Cultural Organization. <http://www.ibe.unesco.org/en/glossary-curriculum-terminology/f/fairness-assessment> [2] Evans, S.G. "Five Characteristics of Quality Educational Assessments - Part Three, Fairness." Northwest Evaluation Association, November 11, 2013. <https://www.nwea.org/blog/2013/five-characteristics-quality-educational-assessments-part-three/>

⁴⁹ [1] "Fairness." ETS. <https://www.ets.org/about/fairness/> [2] Dennison, S. "Fairness and Equity Considerations When Creating and Administering Assessments: Part 2." Edmentum, May 9, 2013. <https://blog.edmentum.com/fairness-and-equity-considerations-when-creating-and-administering-assessments-part-2>

⁵⁰ Bulleted text quoted verbatim, with minor adaptations, from: Qualters, D.M. "Inclusive Assessment: Equal or Equitable?" Center for the Enhancement of Learning and Teaching, Tufts University, March 20, 2017. <https://provost.tufts.edu/celt/news/2017/03/20/5209/>

⁵¹ Figure contents quoted verbatim, with minor adaptations, from: [1] "Classroom Assessment Standards." Joint Committee on Standards for Educational Evaluation. <https://evaluationstandards.org/classroom/> [2] "Classroom Assessment Task Force: Classroom

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ENDNOTES

Assessment Standards.” National Council on Measurement in Education.
<https://www.ncme.org/about/classroom-assessment/task-force-standards>

⁵² [1] “Principles and Indicators Summary.” National Center for Fair and Open Testing.
<https://www.fairtest.org/principles-and-indicators-summary> [2] Milner IV, H.R. “Assessment for Equity.” *Educational Leadership*, 75:5, February 2018.
<http://www.ascd.org/publications/educational-leadership/feb18/vol75/num05/Assessment-for-Equity.aspx>

⁵³ [1] Dame, B. and K. Lea. “Using Universal Design to Create Better Assessments.” Edutopia | George Lucas Educational Foundation, May 29, 2020. <https://www.edutopia.org/article/using-universal-design-create-better-assessments> [2] “Universal Design For Learning.” Center for New Designs in Learning and Scholarship, Georgetown University.
<https://commons.georgetown.edu/teaching/design/universal-design/>

⁵⁴ [1] “Checklist for Universal Design of Tests.” Rehabilitation Design and Disability Center, University of Wisconsin at Milwaukee, 2009. p. 1. https://access-ed.r2d2.uwm.edu/resources/Test_Tips_PosterETTE_1.pdf [2] “UDL and Assessment.” Center for Applied Special Technology. http://udloncampus.cast.org/page/assessment_udl [3] “Fairness, Bias, and Cultural-Responsiveness Checklist.” Center for Collaborative Education. pp. 1–4.
<https://studentsatthecenterhub.org/wp-content/uploads/2017/06/Fairness-Bias-and-Cultural-Responsiveness-Checklist.pdf>

⁵⁵ [1] Rose, D.H. et al. “Teaching Every Student in the Digital Age, Chapter 7. Using UDL to Accurately Assess Student Progress.” Association for Supervision and Curriculum Development, 2002. <http://www.ascd.org/publications/books/101042/chapters/Using-UDL-to-Accurately-Assess-Student-Progress.aspx> [2] “Test Accommodations.” Glossary of Education Reform | Great Schools Partnership, August 29, 2013. <https://www.edglossary.org/test-accommodations/>

⁵⁶ Figure contents quoted verbatim, with minor adaptations, from: Thurlow, M.L. et al. “Principles and Characteristics of Inclusive Assessment Systems in a Changing Assessment Landscape.” National Center on Educational Outcomes, University of Minnesota, January 2016. pp. v, 2–3.
<https://nceo.umn.edu/docs/OnlinePubs/Report400/NCEOReport400.pdf>

⁵⁷ Muller, K. et al. “Assessing Student Learning in the Online Modality.” National Institute for Learning Outcomes Assessment, University of Illinois and Indiana University, October 2019.
<https://www.learningoutcomesassessment.org/wp-content/uploads/2019/10/Occasional-Paper-40.pdf>

⁵⁸ [1] Miller, A. “Formative Assessment in Distance Learning.” Edutopia | George Lucas Educational Foundation, April 7, 2020. <https://www.edutopia.org/article/formative-assessment-distance-learning> [2] Miller, A. “Summative Assessment in Distance Learning.” Edutopia | George Lucas Educational Foundation, April 28, 2020. <https://www.edutopia.org/article/summative-assessment-distance-learning>

⁵⁹ [1] Katz, N. “Tips and Tools for Making Online Assessments Work.” WeAreTeachers, May 12, 2020. <http://www.weareteachers.com/online-assessments/> [2] Close, B. “Assessments in a Virtual Environment.” DaVinci Education. <https://www.davinci-ed.com/resources/assessments-in-a-virtual-environment>

⁶⁰ “Online Assessment Strategies for Distance Teachers and Learners.” 3P Learning.
<https://www.3plearning.com/blog/online-assessment-strategies-distance-teachers-learners/>

⁶¹ Figure adapted from: “Remote Learning and the Formative Assessment Process.” Smarter Balanced Assessment Consortium, July 9, 2020. <http://www.smarterbalanced.org/remote-learning-and-the-formative-assessment-process/>

⁶² Standards, Assessment, and Instruction Alignment Worksheet adapted from: Thompson, J. and K.K. Hess. “Assessment Review Tool.” Rhode Island Department of Education and National Center for the Improvement of Educational Assessment, 2012. pp. 3–4.
<https://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Evaluation/Online-Modules/Assessment-Review-Tool.pdf>

⁶³ Checklist for Universal Assessment Design adapted from: [1] Thompson, S.J. et al. “Considerations for the Development and Review of Universally Designed Assessments.” National Center on Educational Outcomes, University of Minnesota, November 2005. pp. 3–4.
<https://nceo.umn.edu/docs/OnlinePubs/TechReport42.pdf> [2] Thompson, S.J. “Assessment Accommodations.” University of Kansas.
http://www.specialconnections.ku.edu/?q=assessment/assessment_accommodations

⁶⁴ [1] Dyer, K. “Three Ways to Put Assessment Data to Work in the Classroom.” Northwest Evaluation Association, January 19, 2016. <https://www.nwea.org/blog/2016/three-ways-to-put-assessment-data-to-work-in-the-classroom/> [2] Hammer, B. “3 Ways to Use Student Assessment Data.” Edmentum, October 12, 2018. <https://blog.edmentum.com/3-ways-use-student-assessment-data>

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ENDNOTES

- ⁶⁵ [1] Davis, L. "How To Navigate Student Assessment Data." Schoolology, August 23, 2018. <https://www.schoolology.com/blog/how-navigate-student-assessment-data> [2] "How Assessment Improves Learning," Op. cit.
- ⁶⁶ [1] Zimmerman, E. "Data Driven Instruction: How Student Data Guides Formative Assessments." EdTech Magazine, October 16, 2018. <https://edtechmagazine.com/k12/article/2018/10/data-driven-instruction-how-student-data-guides-formative-assessments-perfcon> [2] Guskey, T.R. "How Classroom Assessments Improve Learning." *Educational Leadership*, 60:5, February 2003. <http://www.ascd.org/publications/educational-leadership/feb03/vol60/num05/How-Classroom-Assessments-Improve-Learning.aspx/> [3] Furger, R. and A. Cronin. "Understanding Assessment: Resources for Parents." Edutopia | George Lucas Educational Foundation, April 16, 2014. <https://www.edutopia.org/assessment-testing-parent-resources>
- ⁶⁷ Figure adapted from: Dyer, "Three Ways to Put Assessment Data to Work in the Classroom," Op. cit.
- ⁶⁸ [1] Balow, C. "Beginners Guide: A Balanced Assessment System." Illuminate Education, November 3, 2016. <https://www.illuminateed.com/blog/2016/11/beginners-guide-balanced-assessment-system/> [2] "What Is Data Driven Instruction?" Children's Literacy Initiative, April 2, 2015. <https://cli.org/2015/04/02/what-is-data-driven-instruction/> [3] "The Assessment Cycle." Office of Academic Planning and Assessment, George Washington University. <https://assessment.gwu.edu/assessment-cycle>
- ⁶⁹ [1] Thomas, N. "When We Talk About 'Assessment,' What Do We Really Mean?" Learning Accelerator, January 17, 2019. <https://learningaccelerator.org/blog/when-we-talk-about-assessment-what-do-we-really-mean> [2] "Assessment Throughout the Learning Cycle." Intel Corporation, 2011. pp. 1-4. <https://www.intel.com/content/dam/www/program/education/us/en/documents/assessing-projects/overview-and-benefits/assessment-throughout-learning-cycle.pdf>
- ⁷⁰ "Using Assessments to Inform Instruction." WRITE Center, August 22, 2019. <http://www.writecenter.org/1/post/2019/08/using-assessments-to-inform-instruction.html>
- ⁷¹ Figure adapted from: [1] Thomas, Op. cit. [2] "Assessment Throughout the Learning Cycle," Op. cit., pp. 1-4.
- ⁷² [1] Buchanan, M. "4 Ways Student Data Can Inform Instruction." Pearson, September 1, 2016. <https://www.pearsonassessments.com/professional-assessments/blog-webinars/blog/2016/09/4-ways-student-data-can-inform-instruction0.html> [2] Forman, . "The Use of Assessment to Improve Instruction." Graduate School of Education, Harvard University, July 21, 2005. <https://www.gse.harvard.edu/news/uk/05/07/use-assessment-improve-instruction>
- ⁷³ Skauge, T. "Formative Assessment Data to Guide Learning." Edmentum International, June 3, 2019. <https://www.edmentuminternational.com/blog/using-formative-assessment-data-to-guide-learning/>
- ⁷⁴ [1] "Formative Assessment 101." Corwin. pp. 5-9. https://us.corwin.com/sites/default/files/upm-assets/82741_book_item_82741.pdf [2] "The Power of Formative Assessment: Use Data to Improve Educator Effectiveness and Student Achievement." FastBridge Learning, February 2018. pp. 3-4, 7-9. <https://www.fastbridge.org/wp-content/uploads/2018/02/whitepaper-formative-assessment.pdf>
- ⁷⁵ Bongiorno, D. and D. Sicklesmith-Anderson. "Using Student Achievement Data to Support Instructional Decision Making." National Association of Elementary School Principals, 2011. pp. 3-5. http://www.naesp.org/sites/default/files/Student_Data_0.pdf
- ⁷⁶ Figure contents quoted verbatim, with minor adaptations, from: [1] "The Formative Assessment Process." Wisconsin Department of Public Instruction, January 2017. <https://dpi.wi.gov/sites/default/files/imce/strategic-assessment/The%20Formative%20Assessment%20Process%20FINAL.pdf> [2] de Leon, V. and A. Allen. "Research Brief: The Informal Formative Assessment Cycle as a Model for Teacher Practice." Institute for Science + Math Education, University of Washington, May 2015. p. 2. <http://stemteachingtools.org/assets/landscapes/STEM-Teaching-Tool-16-Informal-formative-assessment.pdf>
- ⁷⁷ [1] Dwyer, C. and D. Wiliam. "Using Classroom Data to Give Systematic Feedback to Students to Improve Learning." American Psychological Association, 2010. <https://www.apa.org/education/k12/classroom-data> [2] Tomlinson, C.A. "Learning to Love Assessment." *Educational Leadership*, 65:4, December 2007. <http://www.ascd.org/publications/educational-leadership/dec07/vol65/num04/Learning-to-Love-Assessment.aspx>
- ⁷⁸ Hamilton, L. et al. "Using Student Achievement Data to Support Instructional Decision Making." National Center for Educational Evaluation and Regional Assistance, Institute of Education

ASSESSING LEARNING IN RELEVANT AND CONSTRUCTIVE WAYS TOOLKIT: ENDNOTES

Sciences, September 2009. pp. 9, 19–26.

https://www.readingrockets.org/sites/default/files/dddm_pg_092909.pdf

⁷⁹ [1] Chappuis, J. “Helping Students Understand Assessment.” *Educational Leadership*, 63:3, November 2005. <http://www.ascd.org/publications/educational-leadership/nov05/vol63/num03/Helping-Students-Understand-Assessment.aspx> [2] Dyer, K.

“Students Can Own Their Data – 5 Ways to Get Started.” Northwest Evaluation Association, November 29, 2016. <https://www.nwea.org/blog/2016/students-can-data-5-ways-get-started/>

⁸⁰ “Using Student Assessment Data to Support Decision-Making.” Center on Standards and Assessment Implementation, WestEd and National Center for Research on Evaluation, Standards, and Student Testing, March 2018. p. 2. <https://files.eric.ed.gov/fulltext/ED588492.pdf>

⁸¹ “The Importance of Feedback.” Education Hub, April 1, 2018.

https://www.youtube.com/watch?v=_a4y1nYpsWw

⁸² Brooks, C. “Principles from the Feedback Matrix.” School of Education, University of Queensland, November 30, 2017. <https://www.youtube.com/watch?v=FukwXuK-srl>

⁸³ Frano, C.A. “Strategies for Providing Effective Feedback to Students in Online Courses.” Blackboard, November 19, 2013. <https://www.youtube.com/watch?v=7RU-1h8gHsk>

⁸⁴ [1] “High-Leverage Practices in Special Education: Assessment.” Council for Exceptional Children, April 27, 2017. <https://highleveragepractices.org/assessment/> [2] “What Parents Should Know About Assessments.” Michigan Department of Education.

https://www.michigan.gov/documents/mde/What_Parents_Should_Know_618061_7.pdf

⁸⁵ [1] “Engaging Families as Assessment Partners,” Op. cit. [2] “A Parent Guide to Understanding Authentic Assessments for Young Children.” Division of Early Childhood Education, New York City Department of Education. pp. 1–2. https://dwcaonline.org/wp-content/uploads/2018/11/ParentGuidetoAssessmentsfinal13114_update.pdf

⁸⁶ Bulleted text quoted verbatim, with minor adaptations, from: Goodrich, K. “Assessment Literacy: Teacher Tips for Speaking with Parents and Students About Assessments.” Northwest Evaluation Association, June 5, 2014. <https://www.nwea.org/blog/2014/assessment-literacy-teacher-tips-speaking-parents-students-assessments/>

⁸⁷ Student Self-Assessment Form adapted from: Chappuis, Op. cit.

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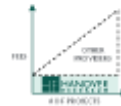
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