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# **Research Synthesis: Developing the Educator Assessment Literacy Professional Learning Screener**

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# Introduction

This document presents a research synthesis for the *Educator Assessment Literacy Professional Learning Screener*, a screening tool developed to help state, district, or school leaders select a high-quality assessment literacy professional learning service by evaluating the quality of content and implementation plans. The purpose of this document is to provide details regarding the research supporting development of the screener and directing interested readers to references for more information.

The screener was developed in response to the need for quality K-12 classroom assessment practice and low levels of educator assessment literacy that has persisted for decades (DeLuca & Johnson, 2017; Popham, 2009; Stiggins, 1991). Ideally, teachers support student achievement through high-quality teaching, which includes leveraging assessment literacy — the knowledge and ability to design, select, adapt, interpret, and use educational assessments in the classroom to make better educational decisions that improve student learning. However, the promise of quality classroom assessment practice has not been realized and many in-service teachers need supplemental professional learning.

To address this need, many states, organizations, testing vendors, and educational institutions are creating assessment literacy professional learning modules and other resources for K-12 educators, teachers and leaders (e.g., school principals, instructional coaches, district leaders, etc.). However, it is unclear if these resources employ high-quality content and implementation plans to effectively support the intended goals of state or local education agencies. While several assessment standards for educators have been created (e.g., Brookhart, 2011; AASA et al., 1997; AFT, NCME, & NEA, 1990), they have not resulted in improved educator assessment literacy in practice. This may be because the assessment literature research base has not been well-integrated with the research on professional learning and synthesized to help educational leaders make informed choices about assessment literacy professional learning services. Thus, the development of the screening tool was guided by two research questions focusing on assessment literacy content specifications for teachers and leaders, as well as implementation features of professional learning programs:

1. What is the foundational content knowledge and skills K-12 educators (teachers and leaders) need to be considered ‘assessment literate’ based on the research literature and experts in the field?
2. What is best practice in implementation of in-service K-12 educator professional development according to reviews of the body of recent literature?

We followed a three-phase process to develop the screening tool. In phase one, we conducted systematic literature reviews for each research question to establish a comprehensive literature base. In phase two, we analyzed our literature base and created a guiding framework to inform the tool development. In phase three, we created and revised the screening tool based on expert feedback.

# Phase 1: Establishing a Literature Base

## Assessment Literacy Search

For the first research question, we systematically reviewed literature from 1991, since Stiggins (1991a) introduced assessment literacy as a term, to June of 2022, when the search was conducted. We used the following search string in ERIC (Educational Resource Information Center): ("classroom assessment" AND "Knowledge") OR ("assessment literacy") AND (elementary secondary education) NOT "Teacher education programs" NOT preservice NOT "Second Language". The search resulted in a total of 424 articles and reports (i.e., standards from authoritative sources); textbook were excluded from the literature review due to accessibility limitations and feasibility of analyzing their full text.

We then performed a relevance screening of the articles by title, then abstract (Valentine, 2019), and then relevance to our research questions. We retained articles and reports that were (1) written in English, (2) available in full text, (3) applicable to the U.S. K-12 context, and (4) focused on in-service assessment literacy content. The first inclusion criterion is necessary because English is the primary language of both researchers and the second criterion is also a matter of practicality. Only a few articles were screened out for these reasons. The third criterion focuses research recommendations that are relevant to the assessment culture of the U.S., which may be quite different from other countries. However, resources providing conceptual frameworks from English-language based countries, such as Canada, United Kingdom, and Australia, were retained in the initial screening. The fourth criterion bounds the search to resources that address assessment literacy content for in-service teachers, rather than assessment literacy for pre-service teacher preparation programs or studies that are off-topic, such as assessment of English as a second language.

We erred on the side of retaining studies for the initial screening, meaning that we treated studies as meeting a particular criterion if we were uncertain, resulting in 63 articles and reports. Many resources were screened out at this stage due to the broadness of our search string with many results based on assessment in non-U.S. contexts or assessment and literacy in reference to another subject. We began reviewing the initial literature base while doing a deeper screening of the full texts, removing articles and reports that did not provide a depth of applicability to the research question. For instance, Popham's (2006a & 2006b) two-page arguments in brief are relevant to assessment literacy in general but do not provide meaningful specifications for what assessment literacy looks like in practice.

We also performed a "snowballing" search of the reference sections of resources included in the initial literature base (Greenhalgh & Peacock, 2005). We relaxed the constraint that articles must be published since 1991 to reduce the possibility that we would omit key resources while ensuring that we would include the most-relevant earlier works in the literature review, such as the 1990 teacher standards for educational assessment (AFT, NCME, & NEA). We also supplemented our literature base through "purposeful sampling" of recommendations from experts, personal contacts, and personal knowledge (Greenhalgh & Peacock, 2005).

## Professional Learning Implementation Search

We followed a similar systematic search methodology for the second research question with similar inclusion criteria, but we focused on articles and reports that reviewed the research of interest: the implementation factors of K-12 professional learning programs that are linked with success in terms of meeting program outcomes, including changing teacher practice or improving student achievement. We bounded our search to research reviews due to the great amount of research on K-12 professional development and availability of articles and reports that synthesize this research.

We used the following search string in ERIC for articles and reports since Borko (2004) reviewed the literature and suggested a research agenda: ("Inservice education" OR "In-service education" OR "Professional Development" OR "Teacher Development") AND (elementary secondary education) AND ("systematic review" OR "meta-analysis" OR "meta analysis" OR "literature review") NOT faculty NOT preservice NOT "career development" NOT "higher education". The search resulted in a total of 41 articles and reports (i.e., research briefs).

We then performed a similar relevance screening as before: starting with the title, then abstract (Valentine, 2019), and then relevance to our research questions. We retained articles and reports that were (1) written in English, (2) available in full text, (3) applicable to the U.S. K-12 context, and (4) reviews of research on professional learning. The first three inclusion criteria were the same as before for similar reasons; for instance, we wanted to avoid literature that addressed higher education faculty professional learning because the higher education context has differing needs, demands, and structure from the K-12 context. Criterion four is necessary to limit our search to a reasonable number of articles due to the plethora of research on this topic. After screening our results, however, only 2 articles were retained because many articles were not reviews or were reviews not relevant to our research question or were reviews of some professional learning activities that were too specific, such as paraprofessional coaching for educating students with intellectual and developmental disabilities (Brock & Carter, 2013) or professional development specific to engineering (Mesutoglu & Baran, 2021).

We decided to expand our literature base by conducting a search for the top hits for 'reviews of professional learning' or 'reviews of professional development' in the IES (Institute of Education Sciences) portal, which resulted in six high-quality articles and reports relevant to our research question and meeting our inclusion criteria. In addition to Borko (2004), these eight review articles and reports, from 2007 to 2020, formed the literature base to address the second research question.

# Phase 2: Synthesizing a Guiding Framework

## Overview

We analyzed our literature base and created a guiding framework to inform the tool development. Many articles and reports regarding assessment literacy (gathered to address the first research question), discussed implementation features of professional learning that was effective or did not work as planned, along with rationales. Consequently, we decided to examine all resources for (a) conceptualizations of educator assessment literacy and (b) recommendations for professional learning implementation. Oftentimes the articles and reports would summarize study findings in a figure, table, or conclusion section that proved fruitful areas to draw implications for our research questions. Many other resources, such as the assessment literacy standards and professional learning reviews, provided clearly structured domains throughout the manuscript that served as sources of implications for our research questions. The result of our analysis is summarized in Table 1 of Appendix A. Overall, the literature review analysis indicated that the notion of assessment literacy has evolved over the past three decades (DeLuca et al., 2019; Brookhart, 2011; Cobb et al., 1999) while the research on in-service professional learning for K-12 educators has coalesced into several key design features (Darling-Hammond et al., 2017; Yoon, 2007).

As displayed in Figure 1, we synthesized the literature into a guiding framework based on recurring themes and new developments for assessment literacy and well-supported evidence for professional learning implementation. The synthesis was conducted by organizing the implications of our literature review analysis into themes (Content Specification, Implementation Features, and Institutional Readiness) with multiple domains. Each domain is supported from numerous sources in our literature analysis. The guiding framework organizes criteria for evaluating the quality of assessment literacy professional learning programs according to the three key elements of any in-service professional learning initiative, inspired by Borko's (2004) professional development system framework:

- (1) the **content** of a professional learning program,
- (2) the **implementation** of a professional learning program, and
- (3) the **school context** within which the professional learning program will be conducted.

Content specification domains are related to program outcomes for participants receiving a professional learning service that comprehensively define assessment literacy of teachers and leaders for educational assessment. Implementation feature domains are design features for structuring a robust professional learning program to support the attainment of the comprehensive assessment literacy outcomes. Institutional readiness buckets are the prerequisite conditions within the school building that need to be met to implement a professional development program with fidelity and appropriate adaptation. The first two elements align to our research questions directly, but the literature review analysis suggested that the specific context and readiness of the educational institution is also an important factor to consider. Addressing each of these domains helps ensure the completeness of an assessment literacy initiative in terms of *what* is covered and *how* it is delivered to successfully produce the intended outcomes related to educator assessment literacy.



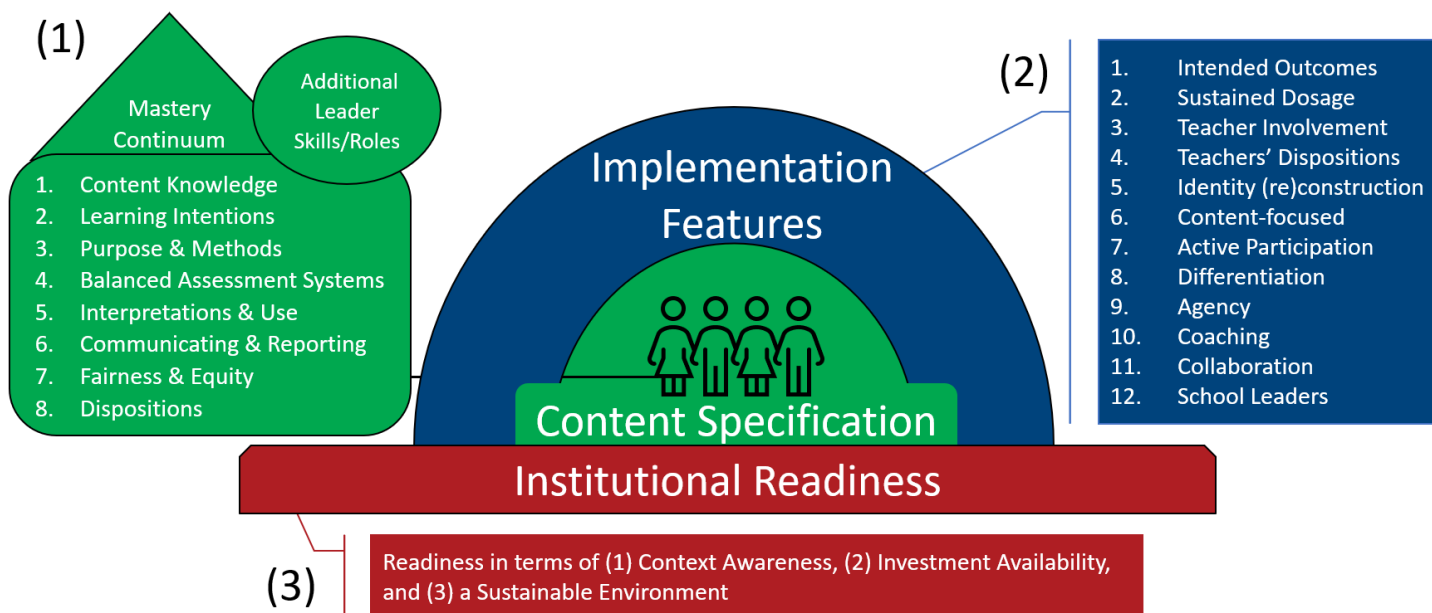


Figure 1. Guiding framework for K-12 assessment literacy in-service professional learning domains

### Content Specification Domains

The professional development program should have a clear articulation of what teachers and leaders completing the program should know and be able to do related to educational assessment (classroom and other assessments such as state tests and school- or district-based assessments). Assessment literacy should be defined comprehensively consisting of the foundational knowledge, skills, and dispositions that fall along a mastery continuum where educators move from novice to expert over time with practice, reflection, and feedback (Xu & Brown, 2016; Deluca et al., 2019; Adie et al., 2020). These foundational capacities should be exercised as a dynamic, context-dependent, negotiated, social practice integrated in the process of teaching and learning (Deluca et al., 2019). As suggested by the literature review analysis, leaders (e.g., school principals, instructional coaches, district leaders, etc.) need additional knowledge and skills based on their roles within the educational system, the critical nature of supporting teachers in their efforts, and the incoherence that can be created by decisions made about assessments at the school or district layer (NCME, 1997; Noonan & Renihan, 2006; Arter et al., 1993).

Since the foundational assessment literacy capacities are set on a continuum of skill development, we first describe what an educator progressing along the assessment literacy mastery continuum may look like. Next, we describe the foundational assessment literacy capacities for both teachers and leaders. They are structured similar to notable standards of assessment literacy for educators (e.g., Brookhart, 2011; AASA et al., 1997; AFT et al., 1990) and supplemented with recommendations from the literature review analysis (see Table 1 of the Appendix A) To ensure that the document remains maximally readable and useful given that numerous sources support each domain, the subsequent text is not interrupted by academic citations; references listed at the end and linked to content specification implications in Table 1 provide the research evidence that support these claims. The foundational capacities have an inherent order to the knowledge and skill domains with the disposition domain woven throughout. Then we present the additional capacities for leaders.

## Assessment Literacy Mastery Continuum

The professional development service supports educators throughout the mastery process. As educators progress along the mastery continuum, they become more independent of the professional development service and more involved in facilitating the local assessment literacy efforts. Thus, the mastery continuum is not explicitly incorporated in the content section of the tool because teachers develop mastery of the foundational assessment literacy capacities as a function of engaging in the robust implementation of the professional learning program.

The professional learning program should continually support educator development of assessment literacy capacities along a progression of a novice-to-expert continuum. A teacher beginning their assessment literacy development is learning the foundational capacities as external principles and applying them with ‘should-do’ thinking informing their classroom assessment practice. They adopt assessment literacy language, seek to fill gaps in their classroom assessment knowledge and skills, and establish connections with peers who are also assessment literacy-minded.

Progressing further on the mastery continuum, the teacher reflects on their own conception of assessment — critically questioning their practices and beliefs. The teacher thinks of assessment as an interpretive and guiding framework requiring their personal agency to support differentiated learning by negotiating reasonable compromises according to contextual barriers, demands, and their personal perspectives. The teacher is ingrained in an assessment-minded community, engaging in professional and informal conversations about assessment.

Through prolonged reflective practice, the teacher reaches a mastery of classroom assessment literacy marked by an intuitive identification of salient aspects of a situation and problem solving that involve deep, tacit understanding of the discipline, context, and pedagogic responses. The gradual consciousness-evoking experience transforms their role and identity to include ‘assessor’ — one who takes ownership of self-directed assessment practice. The assessment practice is integrated in their teaching and learning systems with students, fostering a classroom culture where students value learning from multiple sources of feedback. They also foster an institutional assessment culture by serving as leaders and advocates for assessment and supporting colleagues in their assessment literacy development through mentoring and modeling assessment practice.

## Foundational Capacities: Knowledge, Skills, and Dispositions

**Educators should be skilled at applying pedagogical content knowledge for effective teaching.** A key starting point for moving along the assessment literacy mastery continuum is that teachers understand learning in the discipline area that they teach and are skilled at apply that knowledge in effective teaching strategies. This includes understanding general principles about how students learn and content specific learning progressions in their discipline. Assessment literacy is intended to support educators’ teaching and learning practices within the classroom, content, and context; therefore, their capacity to teach effectively within their discipline is an essential component of assessment literacy. Although researchers often assume educators pedagogical content knowledge and teaching skills, it should be an explicit content specification for assessment literacy.

**Educators should be skilled at setting and communicating learning intentions.** Teachers should be able to create clear learning intentions for teacher planning purposes and student goal setting purposes that are attainable, assessable, and aligned to the standards and curriculum goals. These learning intentions



should be selected so that students can envision what the learning intention means for themselves and what they must do to achieve them. Thus, an educator developing assessment literacy capacity can communicate and represent learning intentions to students in terms that make sense to them, such as telling and demonstrating what achievement of a learning looks like.

**Educators should be skilled in aligning assessment purpose and methods.** Educators must understand the various purposes that assessment can serve such as providing information on achievement, non-cognitive attitudes, or behaviors; or for making norm-reference or criterion-referenced decisions; or for using results for description, diagnosis, and placement for instructional or classroom decisions. They must be able to match assessment designs and options to the intended purpose, such as knowing when and how to employ different assessment methods and item types to gather the information they need to make better educational decisions that support student learning. Educators developing assessment literacy capacity must also know the strengths and weakness of assessment options and different uses of assessment information (formative, interim, and summative) and how to match assessment purpose to assessment design.

**Educators should be skilled at developing balanced assessment systems.** Educators should be able to evaluate the collection of assessments administered over the course of the year used to evaluate student learning. Balanced systems of assessment have features of (1) comprehensiveness in the ways students can demonstrate their knowledge that reflects the breadth and depth of content standards; (2) coherence in the compatibility with models of learning that promote deeper and more meaningful student learning; (3) continuousness in tracking student progress over time; (4) efficiency in the assessments used for educational decisions such that there is no redundancy; and (5) usefulness in the specificity and timeliness of information provided that helps make better educational decisions. In a balanced assessment system, educators developing assessment literacy capacity carefully select each assessment in the system because it provides essential and non-duplicative information on student proficiency and progress.

**Educators should be skilled at supporting appropriate assessment interpretation and uses.** Educators developing assessment literacy capacity must be able to interpret external assessment results to make appropriate decisions about students and groups of students based on the purpose and design of the external assessment. Educators must identify trends in learning relying on multiple sources of data over time from classroom and standardized assessments. They should be able to evaluate the adequacy of assessment results for their intended uses based on the alignment and sufficiency of evidence in relation to state content standards and a basic understanding of measurement error. To support appropriate classroom assessment interpretations and uses, educators must be able to specify assessment targets (student knowledge and skills) and align questions and assessment tasks to elicit appropriate evidence. Educators should also be able to design, select, and adapt assessments for specific purposes and uses. In the formative instruction and assessment context, educators should be able to engineer effective tasks and activities that elicit evidence of student learning needs and strengths and then provide effective, useful, and timely feedback to students. Through the feedback process, educators must be able engage students as active agents of their own learning and activate peers as learning resources for one another. In the summative classroom assessment context, educators need to apply equitable grading practices using clear scoring criteria or rubrics.

**Educators should be skilled at communicating and reporting to relevant stakeholders.** Educators developing assessment literacy capacity can explain classroom and external assessment results and rationale for their educational decisions to the various audiences they serve and work with. With students, they should be able to explain next steps for improving student learning based on results and help students use assessment information to make sound educational decisions for themselves. This requires educators to coach students in analyzing and making sense of their own classroom and external assessment results. With parents, educators must be able to explain results of a variety of assessments (e.g., classroom assessments and external standardized assessments) and their implications for related educational decisions. With colleagues, educators developing assessment literacy capacity can discuss the implications of assessment results on curriculum and instruction (as applicable). A key capacity that undergirds high-capacity assessment literacy communication is educators' ability to recognize misconceptions and limitations of external assessment results for informing instruction, but potential usefulness for formative program evaluation purposes.

**Educators should be skilled at accounting for fairness and equity through the assessment process.** An educator developing assessment literacy capacity recognizes and builds on the funds of knowledge and experience that students bring from their social and cultural backgrounds and makes the instruction and assessment process relevant and connected to a student's life beyond school to promotes meaning and transfer. Educators must avoid bias and support accessibility throughout the assessment development and administration process. Educators should be able to provide appropriate accommodations for students with disabilities (as stipulated in IEPs).

**Educators should be marked by dispositions supporting assessment literacy.** Educators developing assessment literacy capacity should be open to reconceptualizing their assessment identity by reflecting on their (a) beliefs about the value of assessment; (b) knowledge about assessment purpose, types, and uses; (c) confidence in applying high-quality practices in their content area and context (d) feelings about assessment; and (e) role of responsibility and ownership over their assessment practice. Educators should reflect on their potential misconceptions about educational assessment and personal conceptions of assessment and how that shapes their current practice. Finally, an educator who is developing assessment literacy is committed to professional learning, receiving feedback, and improving their practice of teaching and learning.

### Additional Roles and Skills for Leaders to Support Teacher Educational Assessment

Leaders developing assessment literacy capacity should be equipped with the same foundational capacities as teachers to better position them to support teachers by anticipating teacher assessment literacy needs and facilitating conversations about assessment expectations. However, leaders must also be able to accomplish additional tasks and set structures, systems, and conditions in place to support effective educational assessment in teachers and throughout school buildings due to their roles and responsibilities as leaders.

Leaders developing assessment literacy capacity should be capable at developing and implementing equitable assessment policies (e.g., grading policies), judging the quality of an assessment strategy used for decision making, eliminating redundant or not useful external assessments, and using multiple sources of data over time to identify trends in learning for evaluation purposes at the institution level, the program level, and the individual and relevant subgroup levels. They must be willing and able to act on assessment results appropriately, as well as creating the conditions necessary in the school building

for the appropriate use of achievement information and other evidence of student learning such as making time for teachers to engage in professional learning communities during the school day and apply assessment literacy training in their classroom planning and instruction. Leaders must collaborate with staff members to set specific goals for the integration of assessment into instruction and assist teachers in reaching those goals, as well as evaluate teachers' classroom assessment competencies and appropriately build evaluations into the formative and summative supervision process. Not only must leaders be able to communicate assessment results to teachers and parents, but they must be able to address the school board and the larger community as a public face. Overall, leaders must be properly equipped to lead the school in educational assessment by managing the assessment system, communicating across parties, and providing support as needed.

### Implementation Feature Domains

High-quality professional learning programs consist of many of the 12 research-based design features to support the attainment of program outcomes. While educators should be able to adapt outcomes and plans to fit their local context and content, a robust implementation plan with these high-leverage features is necessary to achieve the ambitious goals of a comprehensive assessment literacy initiative. Each feature derives from multiple sources in the research literature. Any professional learning program should be implemented with awareness of the social and cultural differences of each setting and context.

### Intended Outcomes

The professional learning program should clearly articulate intended program outcomes and a common vision for impacting teacher knowledge, skills, and dispositions. Program outcomes and vision should be aligned to institutional goals and needs. The intended program outcomes should be well defined and specific with clear expectations and benefits for all program participants. Attainment of the program outcomes should be supported by a well warranted theory of action or logic model and embedded in a non-evaluative culture promoting growth mindsets in participants.

### Sustained Dosage

The professional learning program should consist of sustained training provided over a period of time that supports program outcomes. Standalone, one-day workshops are unsuited to deliver the comprehensive outcomes for assessment literacy in educators.

### Teacher Involvement

The professional learning program should be open to teacher involvement in implementation-related decision-points, listening to educator input on how to adapt the program to the local context. Teachers should be treated (a) as a source of solutions to questions about implementation and within learning activities, (b) as professionals where the tone and structure of each learning activity is goal-oriented and has a clear agenda with meaningful protocols, and (c) as individuals providing room for teachers' choice in learning activities, such as who they work with and where they focus their learning.

### Teachers' Dispositions

The professional learning program should account for educators' initial beliefs, perceptions, motivations, confidence, experiences, and attitudes about receiving professional learning and about educational assessment. The program should be differentiated based on teachers' initial dispositions and teachers with a lack of buy-in may require more attentive treatment. Research indicates that

professional learning outcomes tend to be different for educators that voluntarily engage or support the learning effort and those that are present out of compulsion.

### Identity (re)Construction

The professional learning program should target a transformational shift in educators' identity and roles as teachers and assessors. This process is rooted in engagement with (a) critical reflection of their initial dispositions and their current teaching and learning practice, (b) learning activities stimulating reflective practice, and (c) self-assessments regarding their growth and needs throughout the professional learning program.

### Content Focused

The professional learning program should promote or extend effective, content-specific curricula and instructional models and materials that are based on well-defined and valid theory of action. Educators should be provided easy access to resources relevant to their content that have been filtered for credibility. Uses of these resource and effective practices (e.g., lesson and unit plans, assessing sample student work, recorded or written cases of accomplished teaching) should be modeled. The professional learning service should support job-embedded learning, modeling how the training can be incorporated into the teachers' larger curriculum and instructional practices.

### Active Participation

The professional learning program should incorporate active learning according to adult learning theory and provide hands-on experiences designing and practicing new assessment concepts within their classroom and curriculum. Professional learning that consists largely of passive participant engagement with modules, reading passages, or videos has shown to be ineffective and is not meaningful or engaging to participants. Rather, educators explicitly need to be able to apply assessment practices they learn in their classrooms as part of the professional learning program. Just as the content specific curriculum and instruction of the teacher is incorporated into the professional learning service, so must the professional learning service be incorporated into the specific context the teacher is working in.

### Differentiation

The professional learning program should scaffold to teacher assessment expertise and account for teacher needs by engaging meaningfully and relevantly to individual contexts. Program differentiation should be structured equitably and with socio-cultural considerations addressed for all participants.

### Agency

The professional learning program should foster agency among educators by gradually increasing teacher responsibility and autonomy. The program should support educators in taking on new roles and responsibilities so that they can develop ownership and leadership of their assessment learning and practice. Agency is key for long-term sustainability following models of distributed leadership, dismantling the paragon fallacy, and providing "positive" pressure with expectations for growth.

### Coaching

The professional learning program should provide general and specific coaching and expert support from a knowledgeable other from whom educators can seek consultation. Avenues where educators can receive tailored feedback on their teaching and assessment practice from experts, such as through

direct observation or video recordings, should be established. The feedback provided should be paired with reflection and follow-up coaching sessions as necessary.

### Collaboration

The professional learning program should establish learning communities for collaboration and peer dialog, as well as socialization and connection. Educators must be able to collaborate with each other to work through similar challenges, benefiting from each other's knowledge and experience. Moreover, learning communities help establish a long-term change in the local culture. The professional learning program should support community formation and facilitate the establishment of school structures that sustain the learning community through the development of an organic group identity and norms for interaction — teachers must be involved in the shaping of the learning community structure and goal. Educators need to adopt communal responsibility for norms and behavior regulation as well as assuming responsibility for their colleagues' growth and development. Conditions within a learning community enable collaboration which is a key component of transferring professional learning content into regular teaching practice at the individual and communal levels.

### School Leaders

The professional learning program should incorporate and differentiate roles of school leaders. School leaders must be able to learn the foundational assessment literacy content to anticipate the needs of teachers but also be involved in implementing the learning service so that teachers are supported in their learning efforts. For instance, leaders must be able to evaluate and redesign the use of time and school schedules so that teachers can attend to work related to the professional learning program and leaders must serve as a bridge between different teacher groups and the professional learning program.

### Institutional Readiness Domains

Institutional readiness domains are related to the prerequisite conditions within the school or district, or both, that need to be met to implement a professional learning program with fidelity and appropriate adaptation. While the content specification domains and implementation feature domains are the necessary considerations for selecting a high-quality professional learning program, the literature review analysis suggested that the specific context and readiness of an educational institution is an important factor for successfully implementing the selected professional learning program such that it can produce the intended outcomes related to educator assessment literacy. Some institutional readiness domains were included in the screener because the selection of an assessment literacy professional learning service is made in relation to a specific context, but many were omitted for being beyond the scope of the screening tool. The considerations that were expressed across multiple sources and had meaningful impacts on the content specifications and implementation features were synthesized and included in the institutional readiness domains. For instance, in addition to describing the professional learning activities that are worth the investment of scarce resources, Archibald and colleague (2011) provided guidance for decision makers when making resource allocation decisions as well as how to evaluate the efficacy of professional learning programs. Thus, the screener addresses the need to consider resource allocation capacity and professional learning effectiveness but does not provide guidance for how to do so.

### Context Awareness

Decision makers selecting an assessment literacy professional learning program should consider the goals and vision for curriculum, instruction, and assessment of the institution(s) that the program is to

be implemented in. They need to understand how the assessment literacy initiative fits within those larger policy goals and vision to address the problem(s) that the district or state is trying to solve. The decision-maker would benefit from knowing teacher needs within the local school and if they align to the assessment literacy efforts, as well as how involved educators are will to be in implementation decision-making.

### Investment Availability

Decision makers selecting an assessment literacy professional learning program should consider the number of resources, including time, money, and personnel efforts, that the school has available to support the implementation of a comprehensive assessment literacy professional learning program. For instance, whether the school leaders will be able to allocate time in the school day for teachers to implement new instructional assessment literacy-based approaches including time needed for teacher collaboration and individual practice. A key investment consideration is whether the school leaders can devote their own time and energy to be actively involved in the learning effort and serve as leaders for their teachers.

### Sustainable Environment

Decision makers selecting an assessment literacy professional learning program should consider the functionality of the school culture. For instance, is there a culture of compliance and isolation among teachers or has there been an emphasis on learning for teachers and collaboration among teachers, where teachers are receptive to relevant and timely feedback in relation to achievable goals. Additionally, decision makers must consider what systems need to be set in place to track and assess the effectiveness of the professional learning effort for formative feedback and summative evaluation.



## Phase 3: Creating and Piloting the Screening Tool

Third, the creation of the screening tool was inspired by the [Next Generation Science Standards Lesson Screener](#), which was intended to be a quick review tool for selecting lessons warranting further consideration. The *Educator Assessment Literacy Professional Learning Screener* was designed in a similar format and intended to be a comprehensive initial review of potential assessment literacy professional development programs in accordance with the literature synthesis developed in phase 2.

We shared the screening tool (available in Appendix B) and requested feedback from experts in assessment literacy and potential users, such as the state education agencies of the Balanced Assessment System Collaborative through the Council of Chief State School Officers (CCSSO). Specifically, we asked four questions:

1. What are your suggestions/feedback for improving the content of the tool?
2. What are your suggestions/feedback for improving the format of the tool?
3. What are your suggestions/feedback for improving the utility of the tool?
4. Other comments/feedback/suggestions?

Responses were recorded either through a google survey or during an informal, semi-structured group interview. Several themes were evident throughout responses. Many respondents reacted positively, believing that the screening tool can be quite useful; however, a key emphasize was that working through the screening tool is or would be overwhelming due to how extensive the tool is. Thus, most suggestions for improving the tool were focused on reformatting or alternative ways of presenting the content to maximize the screening tool's utility for potential users specific needs — finding ways to make the depth of content more palatable and easier to work through for rather busy state and district leaders some of whom may not be very well acquainted with assessment literacy.

In summary, the screening tool and research synthesis can serve as useful resources for state and district leaders that need to make decisions regarding the selection or modification of assessment literacy professional learning programs for in-service educators.

# Appendix A Literature Review Analysis Table

Table 1.

*Analysis of assessment literacy conceptualization and professional learning implementation recommendations from the literature review*

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
AFT et al., 1990	Report	Prescriptive	7 standards: (1) choosing and (2) developing assessment methods appropriate for instructional decisions; (3) administering, scoring, and interpreting results of externally produced and teacher-produced assessment methods; (4) using assessment results when making decisions about individual students, planning teaching, developing curriculum, and school improvement; (5) developing valid pupil grading procedures; (6) communicating assessment results to stakeholders; and (7) recognizing unethical, illegal, and inappropriate assessment methods and uses of assessment information	
Stiggins, 1991a	Article	Prescriptive	practical literacy for generating and using data; knowing and acting to ensure the four key attributes of good data: (1) setting a clear target, (2) using an appropriate sample, (3) addressing known sources of interference, and (4) judging usability of results; care about high-quality education and prevent unsound assessment; develop and use all 3 basic types of assessment; understand strengths and limitations of assessment options	focused on classroom assessment and on individual user needs

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Stiggins, 1991b	Article	Empirical observations of task analysis	6 dimensions of classroom assessment competence: (1) classroom uses, (2) achievement targets in assessment terms, (3) qualities of sound assessment, (4) assessment tools, (5) interpersonal dimensions of classroom assessment, (6) feedback on assessment results.	aimed at getting teachers started and keeping them learning about assessment on their own; showing how assessment enables doing teaching faster, easier, and better; interactive and modeling practices
Arter et al., 1993	Article	Conceptual Framework	12 competencies for principals across 3 roles of manager, leader, & communicator	
Stiggins, 1995	Article	Prescriptive	5 standards: (1) clear purposes; (2) clear and appropriate achievement targets; (3) proper assessment method; (4) sample student achievement appropriately; and (5) control for all relevant sources of bias and distortion.	3 barriers to address: educator fear of assessment and evaluation (personal vulnerability), insufficient time to assess well (time for professional development and time to integrate the ideas learned into instruction), & public perceptions of the state of assessment practices (lack of teacher content mastery knowledge, integrating curriculum, norm-referenced standardized testing, report card score quality, SAT alignment)
AASA et al., 1997	Report	Prescriptive	12 competencies for educational administrators	
Cobb et al., 1999	Article	Prescriptive	links between 5 purposes and methods of assessment; a 3-component assessment cycle model for teaching and learning; 6 principles of quality classroom assessment	
Stiggins, 1999a	Article	Prescriptive	5 standards: (1) clearly specified achievement expectations for students, (2) serve instructional purposes, (3) appropriate assessment methods, (4) representatively sampling student performance adequately, (5) eliminate sources of bias	

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Stiggins, 1999b	Article	Prescriptive	7 competencies: (1) connecting assessments to clear purposes, (2) clarifying achievement expectations, (3) applying proper assessment methods, (4) developing quality assessment exercises and scoring criteria and sampling appropriately, (5) avoiding bias in assessment, (6) communicating effectively about student achievement, & (7) using assessment as an instructional intervention	
Birman et al., 2000	Article	Review, survey, & case studies		6 key features of quality implementation; favoring higher quality of implementation for fewer teachers than greater quantity of teachers but lower quality
Borko, 2004	Article	Review		4 elements of a professional learning system: (1) professional learning program, (2) teachers, (3) facilitators, & (5) context; participants are typically motivated volunteers; 7 features of professional learning that worked: (1) intensive, (2) subject-matter focused, (3) focused on student cognition, focus on instructional practices, (4) learning communities (with 3 components of community formation: group identity and norms for interaction, communal responsibility for norms and behavior regulation, & assuming responsibility for colleagues' growth and development), (5) incorporate classroom practice, (6) well defined and clearly specified, & (7) connect with curriculum

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Lukin et al., 2004	Article	Describing a program		Assessment Literacy Learning Teams, collaboration with colleagues, 10-11 meetings per year, flexibility, 2 peer partnerships (teachers with administrators), purchasing resource materials, administrator support, fostering an environment conducive to risk-taking, clear descriptions of benefits and expectations for educators and students, time for meaningful learning
Stiggins, 2004	Article	Prescriptive	4 productive beliefs: (1) classroom to high-stakes support, (2) meeting student information needs, (3) high impact day-to-day classroom assessment, (4) teachers sound assessment literacy practice	
Noonan & Renihan, 2006	Article	Literature review	3 aspects of capacity: (1) making sense of data, (2) acting on data, & (3) discussing data use and misuse; authentic self-reflection on knowledge, appreciations, and skills for assessment leadership among principals; 5 sources of support and authority needed by principals	developing assessment leadership roles as visionary, organizer, and cheerleader; following a distributed leadership model and accounting for paragon fallacy

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Lawless & Pellegrino, 2007	Article	Review		5 features of high-quality professional learning activities: (1) longer in duration (contact hours plus follow-up), (2) access to new technologies for teaching and learning, (3) actively engage teachers in meaningful and relevant activities for their individual contexts, (4) promote peer collaboration and community building, & (5) clearly articulate a common vision for student achievement; appropriate evaluation strategies must be implemented to assess intended outcomes; account for volunteers differing from non-volunteers in terms of their motivation to learn, their commitment to change, and their willingness to be risk takers
Yoon, 2007	Article	Review		at least 14 hours (workshops or summer institutes with follow-up sessions), directly to teachers, theory of professional learning impact; 3 step process: (1) intensive, sustained, content-focused, coherent, well defined, and strongly implemented; theory of teacher learning; extend curricula/instruction via theory of action; (2) motivation, belief, skill apply professional learning to classroom, ongoing collaboration & follow-up w/ experts; removing barriers of lack of time, materials, support; (3) evaluating gains
O'Leary, 2008	Article	Brief review, Prescriptive	20 assessment literacy topics for professional learning programs in assessment	learning communities, school embedded, cooperative, sustained over time, within and/or across schools with sharing knowledge, experience, and expertise



Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Zwick et al., 2008	Article	Empirical study of ITEMs Module	3 modules on measurement regarding score meaning and interpretation: (1) test scores and distributions, (2) imprecision in individual and average test scores, & (3) interpretation of test score differences and trends	empirically showed that three 25-minute online informational modules statistically increased assessment literacy knowledge
Black & Wiliam, 2009	Article	Conceptual Framework	5 key strategies for formative assessment: (1) clarifying and sharing learning intentions and criteria for success; (2) engineering effective classroom discussions and other learning tasks that elicit evidence of student understanding; (3) providing feedback that moves learners forward; (4) activating students as instructional resources for one another; and (5) activating students as the owners of their own learning	
Mertler, 2009	Article	Empirical study of a 2-week workshop	9 task-based operationalizations of assessment literacy: (1) identifying & reviewing published tests, (2) developing an objective test, (3) summarizing objective test results, (4) conducting an item analysis, (5) determining validity and reliability of objective tests, (6) interpreting communicating standardized test results, (7) developing valid grading procedures, (8) developing a performance assessment scoring rubric, & (9) determining unethical assessment practices	intensive 2-week workshop is effective in short-term outcomes but unsure whether it produces lasting impact
Popham, 2009	Article	Prescriptive	13 content recommendations for classroom and accountability assessment	professional learning communities
Leighton et al., 2010	Article	Empirical, prescriptive	considerations of adding Cognitive Diagnostic Assessment to assessment literacy	

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Archibald et al., 2011	Research Brief	Review		5 features of high-quality professional learning: (1) alignment with school goals, state and district standards and assessments, and other professional learning activities including formative teacher evaluation; (2) focused on core content and modeling of teaching strategies; (3) inclusion of opportunities for active learning of new teaching strategies; (4) provision of opportunities for collaboration among teachers; & (5) inclusion of embedded follow-up and continuous feedback
Brookhart, 2011	Article	Review, Prescriptive	updating AFT et al. (1990) standards with 11 standards	
Fan et al., 2011	Article	Empirical study of a web module	Triple-A model of assembling, administering, & appraising assessments in a web-based assessment and test analysis system	web-based module on practice, reflection, & revision is effective in short-term outcomes for low knowledge teachers but unsure of lasting impact
Remesal, 2011	Article	Empirical	teacher's perception of assessment as it impacts learning, teaching, accreditation of achievement, and teacher accountability along a pedagogical-regulation to societal-accreditation spectrum	needs to account for teacher's beliefs

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Schneider & Meyer, 2012	Article	Empirical	9 modules focusing on formative assessment: (1) aligning assessments with the cognitive level and content of the curriculum standards; (2) developing and implementing performance tasks; (3) developing and implementing checklists; (4) developing and implementing rubrics; (5) formulating high-quality, multiple choice items; (6) analyzing the quality of multiple choice items to guide the determination regarding what students know; (7) developing portfolios; (8) using valid grading procedures; and (9) interpreting standardized test scores.	year long, about 50-70 percent implementation fidelity of time consuming professional learning (requiring approximately 30 hours of contact hours and 24 hours of homework), 3 phases (instructional videos, coached guided practice, independent homework) 3-hour recertification course was effective in short term assessment literacy improvement with either an experienced coach or a relatively untrained facilitator
Blitz, 2013	Article	Review		online professional learning communities (PLCs) have advantages in flexibility and promoting self-reflection but disadvantages in lower motivation to engage; best practices: (1) structuring collaboration involving participants; (2) pairing experts with less experienced learners; (3) designing activities that promote self-reflection; (4) diverse membership (in roles, areas, and levels of expertise), (5) effective moderator per group, and (6) opportunities to socialize in person
Howley et al., 2013	Article	Empirical	5 codes of how teachers discussed assessment rather than expert conceptions: purposes, expectations, collaboration, types, & instructional strategies; 3 lessons of already assessment literate teachers: favor "formative" assessment, collaborative, and stakeholders' misconceptions of assessment	

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Willis et al., 2013	Article	Conceptual Framework	redefining assessment literacy definitions within Bernstein's learning theory concepts of horizontal and vertical discourse and classification and framing to be an ethical, social, dynamic and layered negotiated with stakeholders within a context	
Rogier, 2014	Article	Conceptual Framework	7 cornerstones: usefulness, reliability, validity, practicality, washback, authenticity, and transparency; 5 step assessment implementation process: (1) plan, (2) identify student needs and learning objective, (3) create blueprint (involve students), (4) incorporate feedback/reflection, & (5) statistical analysis; assessment literacy as hands-on-job practice-to-learn skill	hands-on-job practice-to-learn
Turner et al., 2014	Article	Conceptual Framework	PILOT assessment strategy supporting essential key instructional decisions for continuous learning and assessment: Preassessment, Identifying student strengths and areas of need, Linking differentiated class learning activities to standards, Offering multiple in-class assessment opportunities, and Testing students for knowing and understanding	
Dillon et al., 2015	Article	Descriptive		5 features of a successful multi-year coached collaborative endeavor for assessment literacy culture: (1) 3-5 years of ongoing support, (2) differentiated approach to professional learning, (3) collaboration, (4) technology, & (5) consultation or coaching

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Calvert, 2016	Report	Prescriptive, Qualitative Interviews		teacher agency as part of adult learning with supporting 9 conditions; 7 steps to improve agency: consulting teachers and principals, reorganizing school day, involve and support teachers in analyzing data and teaching and learning; 6 features of agency; overarching theme of a deep and meaningful shift in responsibilities and roles of teachers in their learning and relationships with teachers and administrators
DeLuca et al., 2016a	Article	Systematic Review	8 potential features as (1) assessment purposes, (2) assessment processes, (3) communication of assessment results, (4) assessment fairness, (5) assessment ethics, (6) measurement theory, (7) assessment for learning, and (8) assessment education and support for teachers	gain information on teacher perspectives to inform professional learning
DeLuca et al., 2016b	Article	Conceptual Framework	Re-operationalizing assessment literacy in terms of 4 themes (purpose, process, fairness, & measurement theory) and 3 approaches (of, for, & as) and teacher perspectives (confidence in classroom assessment, learning priorities, & learning preferences)	differentiated and targeted based on teachers' identified approaches to assessment, areas of confidence, and professional learning priorities and preferences (teacher career stage), orientation to assessment, teacher learning goals in assessment, or teachers' preferred mode of professional learning at individual, school, board, and regional levels

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Garet et al., 2016	Research Brief	Review		summer institutes with periodic teacher meetings and coaching during school year of intensive, content-focused professional learning improved teachers' knowledge and some aspects of their practices but not student achievement; hypothesizing that increasing duration and emphasizing more coaching may not be sufficient, but type of coaching (general vs. specific) may make a difference
Ghaicha, 2016	Article	Synoptic Review	5 broad buckets of educational assessment: (1) concept of assessment; (2) value, functions, and purpose; (3) levels where assessment occurs; (4) classroom assessment, alternative assessment, & formative assessment; (5) quality control criteria	
Randel et al., 2016	Article	Randomized Control Trial	defined according to Stiggin's Classroom Assessment for Student Learning (CASL) program: key areas of include classroom assessment, such as assessment purposes, accuracy of assessment, and using assessment results, and emphasizes matching learning targets with assessment methods, providing descriptive feedback, and activating student involvement in learning	textbook, DVDs, ancillary texts, and a learning team facilitator handbook; reading, classroom applications, individual reflection, and learning team meetings



Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Roeber, 2016	Interview Transcript	Webinar	different for stakeholders, such as leaders (understanding what teachers should know about how and when to select each method; promoting a culture of appropriate assessment practice and assessment literacy for themselves and staff; using data to improve student learning; identifying trends in learning) and teachers (choosing and developing assessment methods appropriate for instructional decisions; effectively administering, scoring, reading, and interpreting the results of externally- and teacher- produced assessment methods; using results to inform decisions about individual students instruction, curriculum development, and school improvement; developing valid student grading procedures; communicating results; and recognizing unethical, illegal, and inappropriate assessment methods and uses of assessment information	developing assessment learning opportunities at the introductory, intermediate, and advanced levels; endorsing teacher certificates by creating an assessment specialization; teacher assessment specialist at district-level
Xu & Brown, 2016	Article	Literature Review, Conceptual Framework	Assessment Literacy in Practice framework, 3 levels of mastery: (1) basic mastery of educational assessment knowledge (disciplinary/PCK; assessment purpose, content, and methods; grading; feedback; peer and self-assessment; interpretation and communication; & assessment ethics); (2) internalized set of understanding and skills of the interconnectedness of assessment, teaching, and learning (cognitive and affective dimensions, views of learning and epistemological beliefs, & compromises in assessment decision-making and action-taking); & (3) self-directed awareness of assessment processes and one's own identity as an assessor.	reflective practice and community participation for teacher learning and identity (re)constructing; long-term, sustainable, individualized, and 'on-the-job', & treating teachers as individuals and professionals

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Cooper et al., 2017	Article	Focus Groups, Conceptual Framework		4 part referencing of assessment knowledge for evidence-informed practice: (1) sources of knowledge (other teachers, school administrators, materials produced for professional learning), (2) evaluated research (research that was sifted and filtered through a variety of mechanisms, such as professional learning events, formal training opportunities, and principals), (3) connecting research to practice (practical and feasible to implement in their classrooms, aligned with current practices), (4) challenges & teachers' needs (time, accessibility of research, and the lack of clear implications for practice); packaged accessibly and usefully for practitioners (e.g., access to knowledge must be convenient and resource websites widely distributed to practitioners, active forms of communicating research knowledge with teachers)
Darling-Hammond et al., 2017	Report	Review		7 features of effectively structured professional learning resulting in changes to teacher practices and improvements in student learning outcomes: (1) content focused; (2) active learning using adult learning theory; (3) collaboration, typically in job-embedded contexts; (4) modeling of effective practice; (5) coaching and expert support; (6) feedback and reflection; (7) sustained duration; being contextually responsive, planning and anticipating 6 barriers to poor implementation; 7 implications for policy and practice

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
DeLuca & Johnson, 2017	Article	Literature Review	personally meaningful, contextual, practice operationally	self-assessments & feedback from experts
Edwards, 2017	Article	Developing a Rubric	10 dimension novice-to-expert skill acquisition rubric for summative assessment literacy: (1-5) knowledge of assessment: ability to describe, purposes of summative, what to assess, assessment strategies and design, assessment interpretation; (6-8) understanding context for assessment: NCEA, preparing students for standards-based, using summative formatively; & (9-10) recognizing impact of assessment: understanding consequences, fairness	
McCafferty & Beaudry, 2017	Article	Gallery Walk	5 + 7 High-Impact Strategies conception: (1-2) Where am I going: clear learning, models of strong and weak work with rubrics (e.g., success criteria and examples); (3-4) Where am I now: timely and descriptive feedback that directly affects learning, student self-assessment and goal setting; (5) How do I close the gap & what are my strategies to get there: use evidence of student learning to determine next steps; (6) focused practice and revision; (7) student self-reflection, tracking, and sharing learning and progress with others	a gallery walk used as an assessment literacy introduction and space for connecting educators
Looney et al., 2018	Article	Conceptual Framework	reconceptualizing assessment literacy as a 5 part Teacher Assessment Identity: I know, My role, I feel, I believe, I am confident	
DeLuca et al., 2019	Article	Empirical & Conceptual	creation of a novice to expert assessment literacy learning continuum: (a) learning the letter, (b) practicing the letter, (c) responding to the letter, (d) adopting the spirit, and (e) leading the spirit	learning communities, embedded practice & ownership, collaboration, leadership development, self-assessment & peer dialog, and a knowledgeable other facilitator

Author & Date	Resource Type	Study Type	Implications for Assessment Literacy Content	Implications for Implementation Features
Adie et al., 2020	Article	Conceptual Framework	Expanding Australian Professional Standards for Teachers' Standard 5: (1) assess student learning, (2) provide feedback to students on their learning, (3) make consistent and comparable judgements, (4) interpret student data, (5) report on student achievement as defined for 4 proficiency roles: graduate, proficient, highly accomplished, & lead; according to a proficiency progression model of novice to master	critical reflexivity, teacher agency, risk-taking to learn, and the emotional engagement of the learner to take responsibility for their actions
Bailey et al., 2020	Report	Describing Online Asynchronous Modules	developing, scoring, and using performance assessments & focusing on their purpose for standards-alignment, quality, results communication, and engaging practices	five 30-minute modules effective for short term outcome
Guskey, 2020	Article	Prescriptive	2 recommendations for teachers: need help to broaden the ways they gather information on student learning and use that information to design effective instructional activities & need guidance in how to involve students in the assessment process so that students become insightful judges of their own performance and better self-regulators of their learning progress	
Shepard et al., 2020	Report	Prescriptive	11 principles for teachers, 6 for leaders, and 5 for states on assessment practice that fosters an equity-focused learning culture	

## Appendix B Screening Tool

*[This page intentionally left blank; the Screening Tool can be found on the next pages]*

## Introduction

Many organizations and testing vendors are creating educator assessment literacy professional learning modules and other resources for K-12 teachers and leaders. It is unclear if these professional learning modules and resources include high-quality content and implementation plans that will ultimately support the intended goals of state or local education agencies. Therefore, the purpose of the Educator Assessment Literacy Professional Learning Screener is to support state or local education agencies to evaluate the quality of *comprehensive* assessment literacy professional learning content and implementation plans before the state, district, or school selects an assessment literacy professional learning program and launches assessment literacy efforts. The tool is intended to help state, district, or school leaders differentiate among professional learning resources to select a high-quality assessment literacy professional learning program that meets their needs and goals.

For the purposes of using the screener, professional learning is defined as in-service professional development for K-12 educators (teachers and school or district leaders) and assessment literacy is defined as the application of foundational assessment capacities within the dynamic, context-dependent, and negotiated social practice of teaching and learning. The screener should be used to inform the selection of *comprehensive* assessment literacy efforts (i.e., all assessment literacy capacities) rather than *specific* assessment literacy content or skills (i.e., developing rubrics or changing formative assessment practices). While specific assessment literacy content can be very valuable on its own, one screener tool cannot do it all. This tool includes the breadth of the foundational knowledge and skills K-12 educators (teachers and leaders) need to select, design, interpret and use educational assessments to support better educational decision-making that improves student learning. As a result, the content specification included in this screener is not detailed enough to support states, districts, or schools in evaluating the quality of specific approaches to developing rubrics or formative assessment practices, for example.

Prior to using the tool, we recommend identifying the problem(s) you are trying to solve and clearly articulating how educator assessment literacy professional learning will help address the identified problem(s). You will circle back to this problem statement at the end of the screener.

### Phase 0: Problem Statement

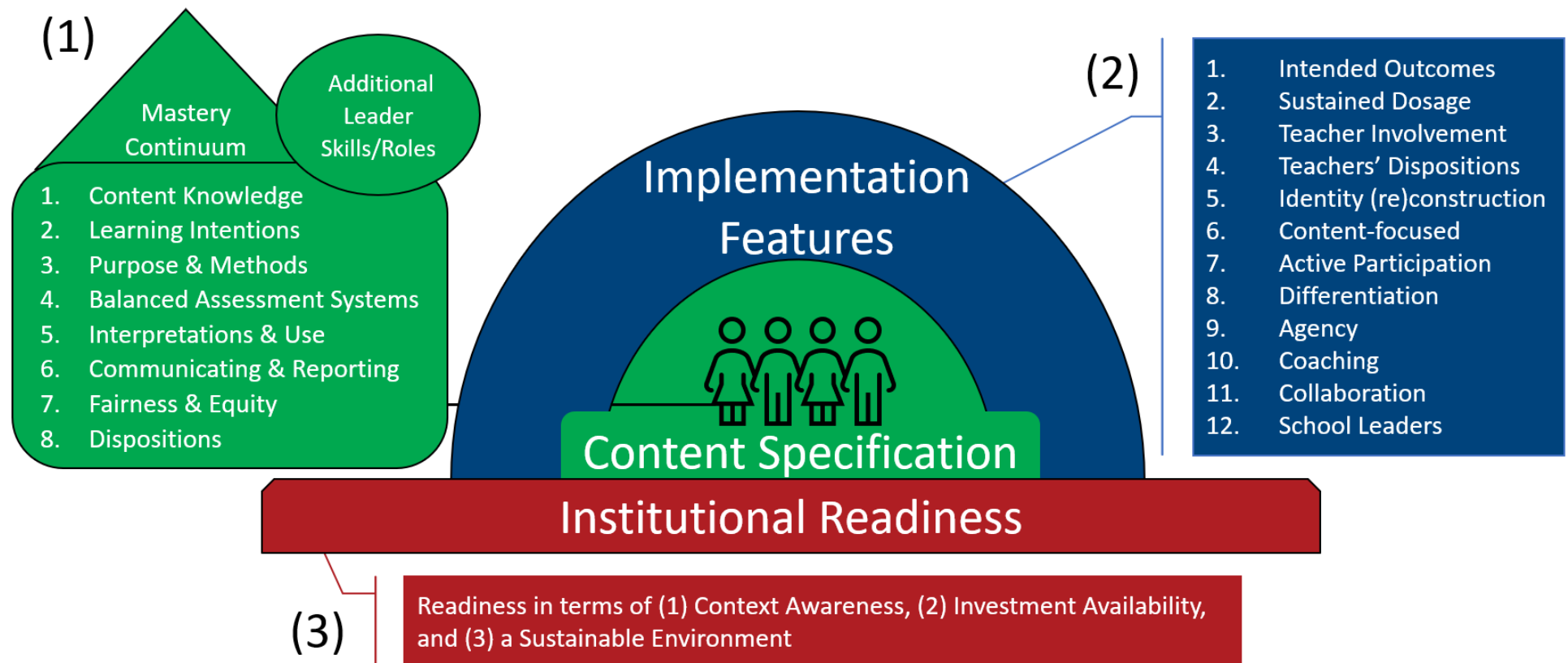
What is the problem(s) your state, district, or school is trying to solve related to assessment? Be as specific as possible.

How do you anticipate an educator assessment literacy professional learning program will help address the identified problem(s)?

What other problems are related to assessment and should be considered and addressed at the same time?

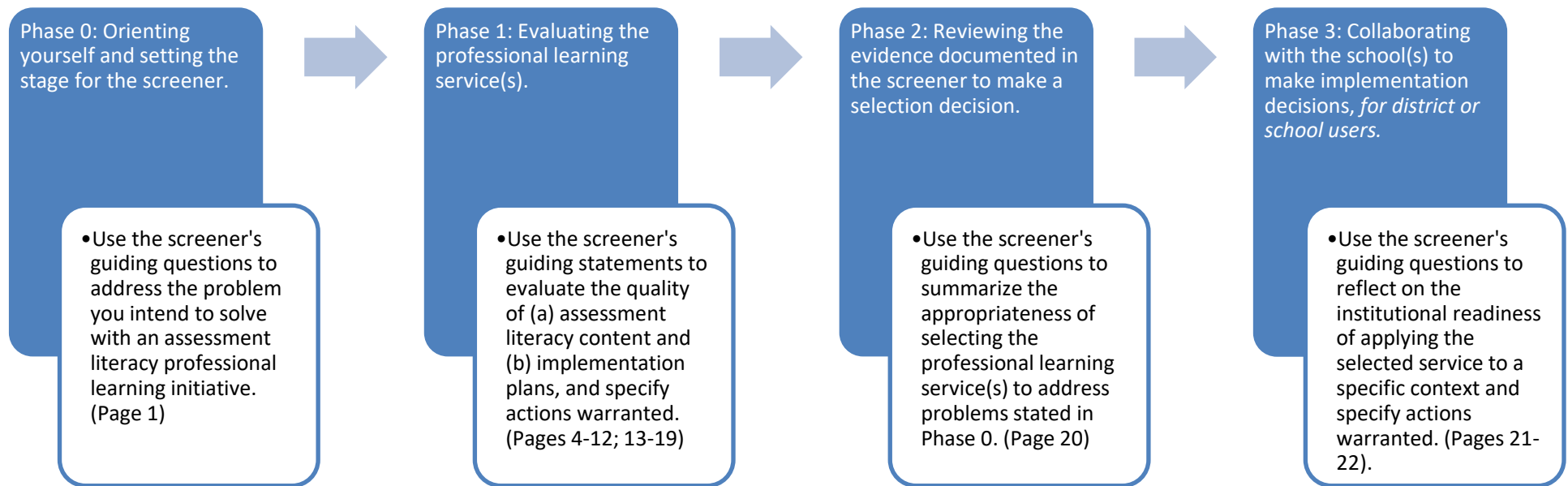
## About the Guiding Framework for K-12 Assessment Literacy Professional Learning Domains

The screener provides an overview of the high-leverage (1) **content specifications** and (2) **implementation features** of a comprehensive assessment literacy effort as well as the (3) **institutional readiness considerations** for applying an assessment literacy effort within a school context. Details for each of these three elements can be found in the corresponding [Research Synthesis](#) and referenced resources. The screener is based on a guiding framework inspired by salient standards for classroom assessment and educator assessment literacy, as well as a systematic review of professional learning implementation. **Content specification** domains are related to program outcomes for K-12 teachers and leaders that comprehensively define educator assessment literacy capacities for educational assessment (classroom and other assessments such as state tests and school- or district-based assessments). **Implementation feature** domains are design features in a professional learning program that are intended to support the attainment of program outcomes. **Institutional readiness** domains are related to the prerequisite conditions within the school building that need to be met to implement a professional learning program with fidelity and appropriate adaptation. These **foundational knowledge and skills fall along a mastery continuum** where educators move from novice to expert over time with practice and feedback. Leaders (e.g., school principals, instructional coaches, district leaders, etc.) need additional knowledge and skills based on their roles within the system, the critical nature of supporting teachers in their efforts, and the incoherence that can be created by decisions made about assessments at the school or district layer. The mastery continuum can be found in the Research Synthesis because it is an outcome of high-quality professional learning, not a selection criterion.



### Directions for use

The screener operates in multiple phases as displayed in the following figure:



A set of response forms is provided for each phase of the screener. For Phase 1, you will need access to the professional learning service's content outline with descriptions and their implementation plans. Evaluate these resources and contact the service providers to complete the response forms for Phase 1. For Phase 2, review the evidence compiled for Phase 1 and compare the adequacy of the professional learning service for meeting your stated needs in Phase 0. If the service is recommended for selection, *district or school users* can complete Phase 3 to consider how prepared the specific school(s) are to implement a comprehensive and robust professional learning program.

While it is possible for the screener to be applied by an individual, **the quality evaluation and selection process works best with a team of reviewers as a collaborative process:**

- 1) collaboratively complete Phase 0
- 2) individually document evidence and actions warranted for Phase 1
- 3) individually review evidence for Phase 2
- 4) collaboratively discuss findings with team members before checking one of the selection decision boxes for Phase 2
- 5) for district and school users, collaborate with local school educators to complete Phase 3

Working as a group will not only result in a better selection decision but collaboration can also bring the group to a common and deeper understanding of the selection process.



## Phase 1, Step 1: Content Specification

- A. Consider the importance that the professional learning content consists of a comprehensive range and depth of assessment literacy capacities to prepare educators for the wide-ranging demands of assessment-related educational decisions:

Comprehensive assessment literacy content will look <i>more</i> like this:	Comprehensive assessment literacy content will look <i>less</i> like this:
Educators completing the program will understand or apply an exhaustive range of <i>foundational assessment capacities</i> , embedded in their pedagogical subject.	If the intent is to implement a <i>comprehensive</i> assessment literacy professional learning program, educators completing the program will not just be trained in a specific assessment-related skill (e.g., rubric development) or only a subset of educational assessment capacities (e.g., formative assessment strategies).
Educators completing the program will exhibit a positive disposition toward educational assessment with confidence in applying them.	Educator dispositions toward assessment is not explicitly addressed as an outcome and it is assumed that assessment-favorable dispositions will be fostered implicitly or are unimportant.
Leaders completing the program will support, sustain, and foster teachers' <i>foundational assessment capacities</i> by developing additional responsibilities and skills related to assessment policy and leadership.	Leaders either don't receive training at all or receive assessment content that is disconnected from content for teachers. Leaders' assessment content is overwhelmingly evaluative or lacks an emphasis on supportive decision-making and action-taking.
Teachers completing the program will integrate <i>foundational assessment capacities</i> in their teaching philosophy and practice, develop mastery and ownership of educational assessment over time.	Assessment content is treated as external principles, applied in a checklist format, and viewed as lacking utility to benefit the teachers' aim of student learning.

- B. Record evidence for the extent to which the content specification consists of a comprehensive assessment literacy skill set. Based on the evidence, flag concerns regarding the content comprehensiveness and state domains needing supplemental content.

Foundational Assessment Capacity Content Domains	Document evidence of foundational assessment capacity content	Concerns and actions to supplement domains lacking foundational assessment capacity content
<b>1. Look for discipline-specific applications of <i>foundational assessment capacities</i>.</b> <ul style="list-style-type: none"> <li>assessment applied within general principles of how students learn and discipline-specific learning progressions</li> <li>modeling or guided practice exercises related to <i>foundational assessment capacities</i> for differing disciplinary content</li> <li>addressing implications for teachers understanding based on discipline-specific content and typical assessment practices</li> </ul>		

Foundational Assessment Capacity Content Domains	Document evidence of foundational assessment capacity content	Concerns and actions to supplement domains lacking foundational assessment capacity content
<p><b>2. Look for training that helps teachers set learning intentions and communicate them to students.</b></p> <ul style="list-style-type: none"> <li>• learning intentions used for the teachers' lesson and assessment planning</li> <li>• judging if learning intentions are attainable for their students and can be assessed</li> <li>• teachers should be able to communicate learning intentions to students such that students understand their end learning goal or target</li> </ul>		
<p><b>3. Look for training to align assessment purpose and methods for intended educational decisions.</b></p> <ul style="list-style-type: none"> <li>• the differing purposes of assessment and strengths and weakness of assessment options</li> <li>• alignment from intend uses to ways of gathering information through assessment</li> </ul>		

Foundational Assessment Capacity Content Domains	Document evidence of foundational assessment capacity content	Concerns and actions to supplement domains lacking foundational assessment capacity content
<p><b>4. Look for a balanced assessment system perspective.</b></p> <ul style="list-style-type: none"> <li>• focuses not just on any one assessment, but the collection of assessments used to inform teaching and learning, and make judgments about student achievement</li> <li>• features of balanced assessment systems include: coherence, comprehensiveness, continuousness, efficiency, and usefulness</li> </ul>		
<p><b>5. Look for content supporting appropriate classroom assessment practices.</b></p> <ul style="list-style-type: none"> <li>• designing, selecting, and/or adapting assessments for specific purpose and uses</li> <li>• creating clear scoring criteria and/or rubrics, grading student work</li> <li>• providing effective, useful, and timely feedback</li> <li>• foster student engagement in the learning and assessment cycle</li> </ul>		

Foundational Assessment Capacity Content Domains	Document evidence of foundational assessment capacity content	Concerns and actions to supplement domains lacking foundational assessment capacity content
<p><b>6. Look for content supporting appropriate interpretation and use of assessments for large-scale purposes related to student achievement and growth.</b></p> <ul style="list-style-type: none"> <li>• interpret standardized assessment results and different kinds of score reporting</li> <li>• understand measurement error to make appropriate decisions about students and groups of students</li> <li>• evaluating alignment and sufficiency of assessment evidence</li> <li>• identifying trends in learning using multiple sources of data</li> </ul>		
<p><b>7. Look for content supporting clear and effective communication and reporting practices to relevant stakeholders regarding assessment of student learning.</b></p> <ul style="list-style-type: none"> <li>• differentiated based on audience and purpose of communication</li> <li>• seeking to explain results and implications on educational decisions</li> </ul>		

Foundational Assessment Capacity Content Domains	Document evidence of foundational assessment capacity content	Concerns and actions to supplement domains lacking foundational assessment capacity content
<p><b>8. Look for content about fairness and equity considerations throughout educational assessment practices.</b></p> <ul style="list-style-type: none"> <li>• opportunity to learn and to perform factors</li> <li>• accessibility needs, modifications, and accommodations</li> <li>• non-discrimination, social justice, and inclusion, culturally relevant, funds of knowledge</li> </ul>		
<p><b>9. Look for engagement of educators' initial dispositions toward educational assessment, personal assessment identity, and fostering assessment-positive dispositions.</b></p> <ul style="list-style-type: none"> <li>• reflection of their knowledge of, belief in, and confidence to perform <i>foundational assessment capacities</i></li> <li>• commitment to continued professional learning</li> </ul>		

Additional Assessment Literacy for <u>LEADERS</u> Domains	Document evidence of additional assessment literacy for leaders content	Concerns and actions to supplement domains lacking additional assessment literacy for leaders content
<p><b>10. Look for content specific to leaders and what they need to support and sustain teachers' long-term educational assessment practices?</b></p> <ul style="list-style-type: none"> <li>• establishing equitable assessment policies and sound administrative decisions regarding assessment information</li> <li>• creating the school/district conditions and culture for success</li> <li>• evaluating teachers' <i>foundational assessment capacities</i> and providing appropriate support, coaching, and feedback</li> </ul>		

## Phase 1, Step 2: Implementation Features

- A. Consider the importance that the professional learning service consists of at least the following research-based implementation design features to enable the attainment of intended outcomes:

A robust implementation plan will look <i>more</i> like this:	A robust implementation plan will look <i>less</i> like this:
Intend program outcomes are clearly defined with a thorough articulation for how implementation supports attainment of outcomes. Outcomes are open to adaptation to local context.	Intended program outcomes are vague with unclear expectations or benefits for educators or students and may be expressed in an evaluative tone. Program theory of action or logic model does not align to intended outcomes.
Implementation is structured so it is sustained and job-embedded. Implementation allows for differentiation based on teacher and leader needs, experiences, and dispositions.	Implementation is a one-off training with little to no follow-up or coaching.
Implementation encourages active participant engagement with activities that support embedding learning in local content and context.	Implementation is nearly exclusively through passive participant engagement. Assessment content is provided without activities that encourage transfer to local content and context.
Coaching from an expert is provided to support feedback and/or learning communities are encouraged to foster peer collaboration and community.	Teachers are left to operate independently with no effort to encourage a peer community.

- B. Record evidence for the extent to which the professional learning service consists of key implementation design features. Based on the evidence, flag concerns regarding the soundness of the implementation plan; and actions required to appropriately adapt implementation features to your context.

Implementation Feature Domains	Document evidence of implementation feature	Concerns and actions for improving or adapting implementation feature
<b>1.Look for indented program outcomes:</b> <ul style="list-style-type: none"> <li>Are the outcomes well defined, specific, and achievable?</li> <li>Is there a theory of action or logic model to attain program outcomes?</li> </ul>		

Implementation Feature Domains	Document evidence of implementation feature	Concerns and actions for improving or adapting implementation feature
<p><b>2. Look for extensive dosage of training.</b></p> <ul style="list-style-type: none"> <li>• How many training hours are provided?</li> <li>• Do training hours include intensive workshops?</li> <li>• Are training hours extended throughout the school year?</li> <li>• Is there a multi-year plan?</li> </ul>		
<p><b>3. Look for involving teachers in adapting implementation plans:</b></p> <ul style="list-style-type: none"> <li>• How is the program open to adapting to the local context and involving teachers in decisions on implementation?</li> <li>• Are teachers treated as a source of solutions?</li> </ul>		



Implementation Feature Domains	Document evidence of implementation feature	Concerns and actions for improving or adapting implementation feature
<p><b>4. Look for implementation to explicitly address teachers' dispositions.</b></p> <ul style="list-style-type: none"> <li>• How does the program address teachers' initial beliefs, perceptions, motivations, confidence, and experiences with professional learning and educational assessment?</li> </ul>		
<p><b>5. Look for implementation to target assessment identity (re)construction.</b></p> <ul style="list-style-type: none"> <li>• How does the program provide opportunity for teachers to reflect on their assessment identity and roles as teachers and as assessors?</li> </ul>		

Implementation Feature Domains	Document evidence of implementation feature	Concerns and actions for improving or adapting implementation feature
<p><b>6. Look for implementation to be content focused and content specific.</b></p> <ul style="list-style-type: none"> <li>• How is the assessment training job-embedded in curricula and instructional materials?</li> <li>• How are effective practices modeled?</li> </ul>		
<p><b>7. Look for teachers and leaders to be actively participating.</b></p> <ul style="list-style-type: none"> <li>• How does the program provide active learning with hands-on experiences, such as practice designing and applying new assessment concepts?</li> </ul>		

Implementation Feature Domains	Document evidence of implementation feature	Concerns and actions for improving or adapting implementation feature
<p><b>8. Look for instruction to be differentiated.</b></p> <ul style="list-style-type: none"> <li>• How does the program scaffold assessment training for differing teacher needs, social and cultural background, and progression through assessment expertise?</li> <li>• How is the implementation set to engage meaningfully and relevantly to different sociocultural contexts and serve equity goals?</li> </ul>		
<p><b>9. Look for development of agency in teachers regarding <i>foundational assessment capacities</i> and decision-making.</b></p> <ul style="list-style-type: none"> <li>• How does the program plan to gradually increase teacher autonomy and assessment responsibility, including fostering ownership and leadership of assessment work?</li> </ul>		

Implementation Feature Domains	Document evidence of implementation feature	Concerns and actions for improving or adapting implementation feature
<p><b>10. Look for coaching from a knowledgeable other.</b></p> <ul style="list-style-type: none"> <li>• How available is coaching and support from assessment experts?</li> <li>• How well are experts intended to provide feedback and follow-up with teacher inquiries?</li> </ul>		
<p><b>11. Look for collaboration among peers developing <i>foundational assessment capacities</i>.</b></p> <ul style="list-style-type: none"> <li>• How does the program foster peer collaboration among educators?</li> <li>• Are educators supported to form learning communities to serve as resources for each other, internalize a group identity, and self-regulate as a group?</li> </ul>		

Implementation Feature Domains	Document evidence of implementation feature	Concerns and actions for improving or adapting implementation feature
<p><b>12. Look for explicit involvement and roles for school leaders.</b></p> <ul style="list-style-type: none"> <li>• Does the program incorporate and differentiate assessment training to suit the roles and responsibilities of school leaders?</li> <li>• Are school leaders encouraged to support teachers in the implementation process?</li> </ul>		

## Phase 2: Overall Screening Summary

Prior to making the selection decision, we recommend reviewing the evidence recorded in Phase 1 with others who also completed the review and circle back to the problem statement completed at the beginning of the screener in Phase 0.

To what extent does this educator assessment literacy professional learning program address the problem(s) you identified at the beginning of this screener?

How would it need to be modified or adapted to better meet your needs and context?

Selection decision: ☐ Recommended as-is (minor adjustments may be necessary) ☐ Recommended, pending significant changes ☐ Not Recommended

### Phase 3, Post-Selection, but Prior to Implementation: Institutional Readiness (for School & District Users)

- A. Consider the importance of preparing the school (or other institutional context) to receive and support implementation of the selected professional learning service with high fidelity and appropriate adaptation:

A ready school will look <i>more</i> like this:	A ready school will look <i>less</i> like this:
Educators can clearly articulate the school and/or district's goals and vision for curriculum, instruction, and assessment.	Teachers are not aware of institutional goals for curriculum, instruction, and assessment; leaders have not incorporated institutional goals into an actionable theory of action or logic model.
Leaders can clearly articulate the needs of the specific context and a logic model for how assessment literacy professional learning will help the institution address its identified problems and work towards its identified outcomes. Leaders consult with teachers for professional learning decisions and can identify teacher needs.	Teachers are not involved in professional learning decision-making and teacher needs are unexamined.
Leaders can invest resources, such as time in the school schedule, moneys, technology, and/or personnel efforts.	There is no time available in the school schedule to support professional learning and application.
School culture emphasizes learning for teachers, collaboration, formative feedback, goal-setting, and continuous improvement cycles.	Poor avenues for communication and cooperation between leaders and teachers exist. There is a lack of connection among teachers and meaningful support from leaders.

- B. Consult with local school leaders regarding how prepared the school is to receive and support the selected professional learning program. Based on the reports, flag concerns regarding institution readiness and actions necessary to foster institution readiness.

Institution Readiness Domains	Local school leaders' reports of institution readiness	Reflections and next steps for ensuring institutional readiness
<b>1. Be aware of school context.</b> <ul style="list-style-type: none"> <li>Are the institutional goals and teachers' needs aligned with purpose of the selected assessment literacy professional learning service?</li> <li>What is the state of teacher buy-in? Are resistant, supportive, and influential or leading teachers identified?</li> </ul>		

Institution Readiness Domains	Local school leaders' reports of institution readiness	Reflections and next steps for ensuring institutional readiness
<b>2. Consider the availability of investment.</b> <ul style="list-style-type: none"> <li>• Can sufficient resources be allocated to support the selected professional learning service?</li> <li>• Can the day-to-day and annual schedules be adjusted?</li> <li>• Are school leaders willing to participate in the selected learning effort?</li> </ul>		
<b>3. Consider the sustainability of the school environment.</b> <ul style="list-style-type: none"> <li>• Does the culture among educators foster teacher learning, collaboration, feedback, goal-setting, and results-monitoring?</li> <li>• Can leaders track and evaluate effectiveness of the selected professional learning service for formative changes?</li> </ul>		

**C. Consider the reported evidence** for institutional readiness: is the school prepared to receive and support implementation of the selected professional learning?

Implementation decision: ☐ Recommended as-is (minor preparation may be needed) ☐ Recommended, pending significant changes ☐ Not Recommended



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