Early Literacy Assessment Systems that Support Learning

A Guide to Developing, Implementing, and Supporting District Assessment Systems

This guide offers principles, recommendations, and guidance to Michigan schools and districts as they develop, implement, support, and monitor an Early Literacy Assessment System.

Michigan Assessment Consortium
Improve learning. Increase success.

MICHIGAN Department of Education

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Created by the Michigan Department of Education (MDE) in collaboration with the Michigan Assessment Consortium (MAC) and James Pellegrino, Ph.D. A distinguished group of Principal Contributors provided sustained support and a wide range of expertise in cognitive science, educational assessment, literacy development, professional learning, and organizational development. This document is intended for use by Michigan school districts as they develop, implement, support, and monitor a system of assessment to support student learning in early literacy.

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EXECUTIVE SUMMARY

Across Michigan, it is recognized that literacy rates among our students should be better than they are. At the same time, there is recognition that improved literacy requires focused attention at all levels of development and instruction, but most critically on *early literacy* development.

Fortunately, we have an excellent foundation and momentum to improve literacy instruction in the state, led in large part by the Michigan Department of Education (MDE) and the Michigan Association of Intermediate School Administrators (MAISA) General Education Leadership Network (GELN) Early Literacy Task Force (ELTF), whose *Literacy Essentials* work offers a Literacy Theory of Action and undergirds an active program of professional learning across Michigan.

But at the same time, collectively we need to give more deliberate and informed attention to the role that assessment can and should play in supporting literacy. Attention to assessment is especially important since districts are required by law to implement "assessment systems" that should help to improve literacy rates. As we shall point out, *assessment systems* are much more than arbitrary collections of assessments; the components of such systems must be carefully chosen so that they:

a) focus on important aspects of literacy and its development,
b) serve the needs of different stakeholders, and
c) are conceptually and operationally coherent.

Beyond identifying the possible components of such systems, and possible plans for implementation, assessment literacy is needed among multiple stakeholders so that educators at all levels have the knowledge and support structures to implement assessment systems that improve literacy achievement for all of Michigan's children.

This Guide is intended to serve as the foundation for the development of policy, resources, and professional learning opportunities that serve to outline assessment systems and practices that effectively support literacy development. The Guide represents the work of a diverse group of scholars and practitioners who have identified five key **Organizing and Design Principles** to guide districts in creating an early literacy assessment system (ELAS). These five Principles can be understood individually and collectively as districts work to create an ELAS. Each Principle describes a major idea that give rise to a number of **Recommendations** for design, implementation, and support of a district's ELAS. The five Principles are clustered in three **Implementation Phases**. **Figure A** (*page iv–v*) presents these Principles and Recommendations in one concise table and are described in greater detail—and supported with suggested resources—within the full Guide.

■ FIGURE A *Early Literacy Assessment Systems that Support Learning*

Organizing and Design Principles

PHASE I — Planning for and Designing an Early Literacy Assessment System (ELAS)

Principle #1: The ELAS must be designed to ALIGN AND INTEGRATE WITH ALL SCHOOL- AND DISTRICT-LEVEL SYSTEMS; this includes the systems of curriculum, instruction, professional learning, as well as the overall assessment system.

Principle #2: The ELAS must reflect ASSESSMENT SYSTEM DESIGN FEATURES that make it coherent, comprehensive, and continuous across time and contexts of use.

PHASE II — Implementing an Early Literacy Assessment System (ELAS)

Principle #3: The ELAS must reflect what we know from theory, research, and practice about LITERACY DEVELOPMENT.

Principle #4: The ELAS must reflect what we know about the PURPOSES, USERS, AND TECHNICAL ADEQUACY OF EARLY LITERACY ASSESSMENT.

PHASE III — Supporting and Monitoring an Early Literacy Assessment System (ELAS)

Principle #5: The ELAS must be supported and monitored by a sustained program of collaborative, inquiry-based PROFESSIONAL LEARNING and FEEDBACK.

This chart represents at a glance five key **Organizing and Design Principles** that should guide districts in creating an early literacy assessment system (ELAS). Each Principle gives rise to a set of related **Recommendations** through Three Phases: planning & design, implementation, and support & monitoring of a district's ELAS. The Principles and Recommendations are described in greater detail—and supported with suggested resources—in the full-length Guide.

Recommendations

PHASE I — Planning & Design

1.1: DISTRICT LEADERS should form an **ELAS Leadership Team** charged with guiding the Planning and Design, Implementation, and Supporting and Monitoring Phases of the ELAS.

The **ELAS LEADERSHIP TEAM** should:

1.2: Establish compatibility and coordination of the ELAS with other district- and state-level systems of curriculum, instruction, assessment, professional learning, and accountability.

1.3: Plan thoughtful strategies for engaging with families and the community as key participants in the ELAS process, both as contributors to and recipients of assessment data.

1.4: Develop and adopt a logic model and theory of action for the structure, functioning, and evaluation of the proposed ELAS.

1.5: Identify the educational decisions to be made, assessment information needed to support those decisions, and the stakeholder(s) who will be making the decision(s).

1.6: Construct a framework for the ELAS that includes clearly articulated relationships among the assessment tools and practices relative to a model of competency development in reading, writing, speaking, or listening.

1.7: Use the framework to conduct an audit of all existing district- and school-level assessment tools and practices currently in use to determine whether they meet criteria for inclusion and should remain part of the system.

PHASE II — Implementation

2.1: The **ELAS LEADERSHIP TEAM** should use the logic model and theory of action (called for in Phase I) to guide the selection and implementation of assessment tools and resources for inclusion in the system.

To accomplish Recommendation 2.1, the **ELAS LEADERSHIP TEAM, in collaboration with PRINCIPALS AND TEACHERS,** should:

2.2: Select individual assessment resources on the basis of evidence of their capacity to provide construct-relevant and instructionally valuable information about a student's literacy development and growth in a given literacy domain – reading, writing, speaking, or listening.

2.3: Select individual assessment resources on the basis of evidence that they are developmentally appropriate and respectful with regard to the cognitive, social, emotional, cultural, and performance demands they place on children.

2.4: Select individual assessment resources on the basis of evidence of appropriate levels of technical quality with respect to validity, reliability, and fairness given the intended interpretive use(s) and the potential consequences for students:

High-stakes judgments call for **high levels** of technical quality.

Lower stakes decisions require **sufficient levels** of technical quality

2.5: Provide assistance and guidance to the system's various assessment users to help assure that they can select assessments that best meet their information needs and then use the results from those assessments in appropriate and technically defensible ways.

PHASE III — Support and Monitoring

3.1: The **ELAS LEADERSHIP TEAM** should use the logic model and theory of action to develop plans for professional learning and formative evaluation of the ELAS.

To accomplish Recommendation 3.1, the **ELAS LEADERSHIP TEAM**, in collaboration with **PRINCIPALS AND TEACHERS,** should:

3.2: Gather information about the current level of knowledge and capacity related to literacy, assessment, and professional learning (strengths and gaps) among staff (teachers, administrators, coaches), students and their families, and local policymakers, and use these data to guide the implementation and support of an ELAS.

3.3: Create a cohesive master professional learning plan (Michigan's Professional Learning Policy and associated Standards for Professional Learning) to support all stakeholders responsible for early literacy development and assessment. The plan should address early literacy development and assessment and meet the learning needs of children and instructional needs of teachers based on evidence of need as well as research.

3.4: Budget for and plan to provide substantive resources and support for content-focused professional learning about early literacy development and assessment that is collaborative, intensive, sustained, and job-embedded.

3.5: Participate in statewide efforts to prepare, support, and generate teacher leaders and instructional coaches to promote effective early literacy development and assessment practices, with an emphasis on the use of classroom formative assessment practices.

3.6: Develop a plan for formative evaluation of the ELAS that includes ongoing monitoring and feedback from the field about the quality, utility, and effectiveness of the assessment system as it is implemented and becomes operational.

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Improved literacy requires focused attention at all levels of development and instruction, but most critically on *early literacy* development.

INTRODUCTION

The challenge

Across Michigan, it is recognized that literacy rates among our students should be better than they are. At the same time, there is recognition that improved literacy requires focused attention at all levels of development and instruction, but most critically on *early literacy* development. Fortunately, Michigan has an excellent foundation and momentum to improve literacy instruction in the state. At the same time, there is a need to collectively give more deliberate and informed attention to the role that assessment can and should play in supporting literacy.

Attention to assessment is especially important since districts are required by law to implement "assessment systems" that should help to improve literacy rates. As we shall point out, *assessment systems* are much more than arbitrary collections of assessments; the components of such systems must be carefully chosen so that they:

a) focus on important aspects of literacy and its development,
b) serve the needs of different stakeholders and
c) are conceptually and operationally coherent.

Beyond identifying the possible components of such systems, and possible plans for implementation, assessment literacy is needed among multiple stakeholders so that educators at all levels have the knowledge and support structures to implement assessment systems that improve literacy achievement for all of Michigan's children.

Purpose of this Guide

Given these challenges, this Guide articulates key ideas and principles about the development and assessment of literacy, and how those ideas contribute to assessment system models that can be designed and implemented to support the literacy achievement of all Michigan students. This Guide is intended to serve as the foundation for the development of policy, resources, and professional learning opportunities that advance assessment systems and practices that effectively support literacy development.

The research, findings, and recommendations presented here have been adopted for use by the Michigan Department of Education (MDE) to guide Michigan educators in their work of helping all students achieve literacy. At present, this guidance will assist schools

A NOTE ABOUT ASSESSMENT LITERACY

Throughout this document, you will see references to **assessment literacy.** This term refers to the set of beliefs, knowledge, and practices about assessment that lead a teacher, administrator, policymaker, or students and their families to use assessment to improve student learning and achievement (Michigan Assessment Consortium, 2015). To increase assessment literacy among Michigan's educators and other stakeholders, the Michigan Assessment Consortium (MAC) spearheaded the development of Assessment Literacy Standards (MAC, 2016) by Michigan educators and national experts. The standards, endorsed by the Michigan State Board of Education in 2016, provide a common framework to assist K–12 educators, students, families, and policymakers in becoming more knowledgeable about assessment purposes and uses. The standards are intended for long-term use in the field of education, to continually support assessment-literate educators. Learn more about the conception of assessment literacy used in this Guide at www.michiganassessmentconsortium.org/assessment-literacy-standards.

in meeting state requirements as articulated in Michigan's Read by Grade Three law; it also is intended to be useful to Michigan educators beyond this current policy initiative. While the work appropriately emphasizes the role of assessment systems for learners age 3 through grade 3, we acknowledge that the principles articulated here provide a guide and learning plan that accommodate a PreK–12 vision.

This work is a product of the Early Literacy Assessment System (ELAS) Project, which was initiated through the MDE and coordinated by the MAC. James Pellegrino, Liberal Arts and Sciences Distinguished Professor and Distinguished Professor of Education at the University of Illinois at Chicago, coordinated the development of this Guide, supported by a distinguished group of Principal Contributors (see Appendix).

Critical assumptions

Most Michigan policymakers, educators, and community members agree Michigan needs to address the number of students who are unable to read proficiently by the end of grade 3. Collectively, we recognize that reading proficiency enables them to access and achieve the learning they need to successfully work toward their college and career goals after graduation. We know also that research indicates early reading instruction can prevent learning problems in the future. We recommend that Michigan take advantage of what the research shows about where best to focus our prevention and intervention efforts, including the ways in which assessment can contribute to those efforts.

Michigan law also calls for a "system" of assessment to be put into place. This "system" cannot be just a collection of assessments. Rather, it must be a purposeful set of assessment tools and practices accompanied by professional learning to help educators use assessment productively in their ongoing instructional practice.

Michigan legislators have contributed to creating urgency around early literacy through the Read by Grade Three law (MCL 380.1280f) that compels schools to decide how best to use their limited resources to identify and provide extra support to early learners who display reading deficiencies. Michigan law also calls for a "system" of assessment to be put into place. This "system" cannot be just a collection of assessments. Rather, it must be a purposeful set of assessment tools and practices accompanied by professional learning to help educators use assessment productively in their ongoing instructional practice.

Like many states, Michigan has limited public resources to allocate to education. Therefore, it is imperative that we leverage available resources by putting effort into a thoughtful approach to assessment spending. Furthermore, we need to invest in professional learning to ensure that all assessment decision-makers and users of assessment data have the necessary knowledge and skills to connect assessment practice to literacy curriculum materials and instructional practices. Our driving dilemma, then, is this: How do we ensure that all of Michigan's educators have the knowledge and skills they need to create and use an assessment system that:

- includes both assessment *for* learning and assessment *of* learning,
- integrates with and supports curriculum and instructional practices, and
- promotes the development of early literacy for *all* students.

In writing this Guide, the Principal Contributors sought to bring coherence to each district's *current* efforts regarding how they think about their assessment systems. While planning what to include in the Guide, the group articulated the following assumptions:

- High quality efforts are already underway in Michigan to support and improve teaching and learning for early literacy and assessment-literate practice.
- The Guide's recommendations must be built upon a theory of action that is grounded in defined principles for literacy learning and assessment literacy.
- This theory of action needs to be responsive to the diverse social/cultural/political contexts in which Michigan students live and learn.
- MDE has a responsibility to contribute to and promote such a theory of action.
- Stakeholders—with differing roles—have responsibility for different parts of the theory of action, and each stakeholder group requires a unique level of understanding.
- Different stakeholders can have differing purposes for assessment and must understand the types of educational assessment and how each type serves different purposes.
- Standards for assessment literacy and high-quality practice exist and should form the basis for assessment systems.
- Educators cannot advance student learning if assessment is not used appropriately.
- Stakeholders at all levels need to understand how assessment works as a system, and not as a random collection of practices and tools.
- Teacher practice is the most important in-school factor affecting student achievement, so teachers must be intentionally included in decisions about assessment and supported with high-quality professional learning in how to use assessment.

Early literacy assessment in Michigan: Toward systems of assessment

Before considering what a system of assessment looks like, it is useful to note that Michigan has a long history of interest in early literacy assessment. For example, some readers will remember the state's Michigan Literacy Progress Profile (MLPP), a suite of early literacy assessments developed in the 1990s and used widely in the state for some time. The current context also reflects a strong interest in early literacy assessment. In its Guide to State Assessments, (MDE, n.d.) MDE includes information about the state's benchmark literacy assessment for K–2 as well as summative English language arts (ELA) assessments for grades 3–12. Administration of literacy assessment in Michigan is, in fact, addressed in state law. Most notably with respect to early literacy, the state law mentioned earlier—MCL 380.1280f, commonly referred to as *Read by Grade Three* (although it is more accurately the Read by the End of Grade Three)—calls for the selection and use of one of three or more "valid and reliable screening, formative, and diagnostic reading assessment systems" by school districts and public school academies (and specifies a number of requirements for those assessment systems).

"… a collection of assessments does not entail a system any more than a pile of bricks constitutes a house."

— Coladarci, 2002

The expectation that assessment is used to foster literacy development comes not only from state government but also from organizations within the state. Perhaps most notably, the series of research-supported "*Literacy Essentials*" (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force [MAISA/GELN/ELTF], 2016) include administration and use of assessment.

The Michigan context also extends attention on several fronts to the development of teachers and administrators who can administer and use assessment effectively and deepen effective practice. Each year, the Michigan Department of Education provides training and guidance in administration and interpretation of state summative assessments such as the Michigan Student Test of Educational Progress (M-STEP), Michigan Merit Exam (MME) and others. MDE also provides support to schools in administering the K-2 Early Literacy and Mathematics Benchmark Assessment. In partnership with the Michigan Assessment Consortium (MAC), MDE supports job-embedded professional learning through the Formative Assessment for Michigan Educators (FAME) initiative and improved assessment literacy through the Assessment Learning Network (ALN).

These and other efforts, some of which will be discussed later in this Guide, can contribute to the development of an assessment system with elements that cohere and work together in terms of their intended functions and interpretive uses. But it is essential to note that *"a collection of assessments does not entail a system any more than a pile of bricks constitutes a house"* (Coladarci, 2002).

Recognizing this reality, this Guide:

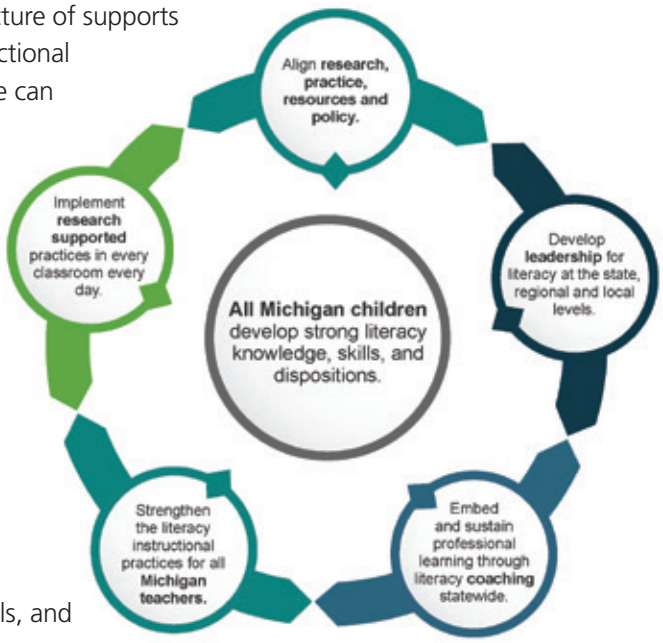
1. **describes what constitutes a coherent system of assessment** specifically designed to promote literacy among all learners,
2. **provides discussions and illustrations of assessment resources** that could contribute to such systems and would be effective in promoting literacy development within various school or district contexts, and
3. **recommends resources and professional learning** needed to support the development and implementation of such assessment systems statewide.

Situating this Guide: A theory of action for literacy in Michigan

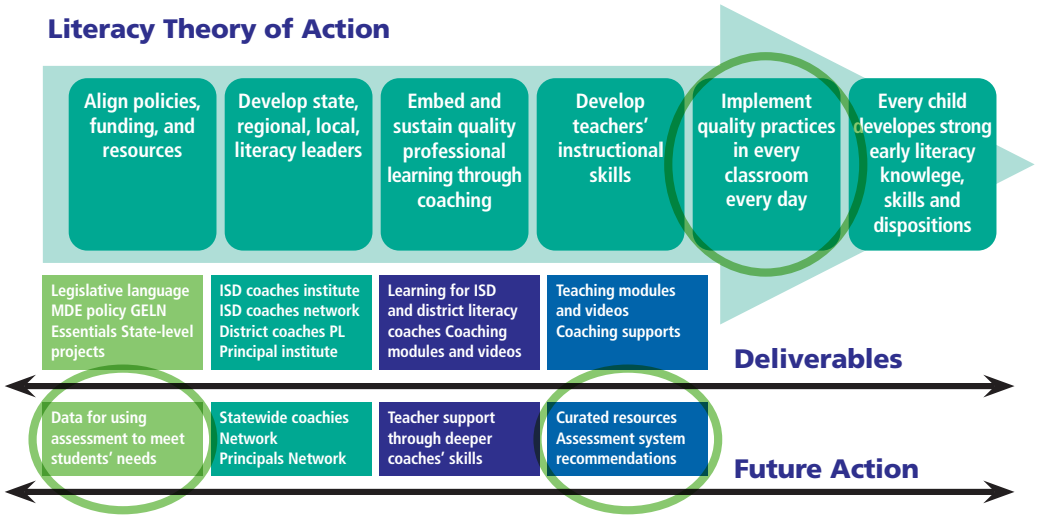
Michigan educators—sometimes in collaboration with business, non-profit, and other partners—are engaging in thoughtful and diverse efforts to address our literacy achievement challenges. Many of the major efforts statewide are described in the appendix "Landscape of literacy initiatives across Michigan" at the end of this Guide. Much of this work is embedded in a theory of action, which is the delivery model for a theory of change. Typically, a theory of action describes how a project or a program is designed and set up. It articulates the mechanisms through which the activities are being delivered, for example through which actors, and following which processes.

Michigan's current theory of action for literacy (shown in **Figure B**) has been developed and thoughtfully advanced by the Michigan Association of Intermediate School Administrators (MAISA) General Education Leadership Network (GELN) Early Literacy Task Force (ELTF). This theory of action requires a structure of supports from the system to the student level. If we have literacy instructional essentials articulated and adopted at the system level, then we can align literacy policies, funding, and resources throughout the system. If we have aligned policies, funding, initiatives, and resources system-wide, then we can develop literacy leaders at the state, regional and local levels. If we have statewide leadership capacity focused on literacy at the school and center levels in an intentional, multi-year manner, then we can ensure sustained, collaborative inquiry-based professional learning, including coaching. If teaching teams and individual teachers are supported by quality coaching, then we can strengthen instructional skills leading to high-quality instructional practices in every classroom, for every student, every day. If we have the core essential instructional practices occurring in every classroom, every day, then ALL students will further develop literacy knowledge, skills, and dispositions leading to improved literacy achievement.

■ **FIGURE B**
Literacy Theory of Action



It is within the context of Michigan's larger theory of action for literacy that this Guide is situated. It addresses the assessment of literacy learning through a balanced, coherent early literacy assessment system (ELAS) designed to meet the purposes of all those involved in the learning process—most importantly students. The circles in **Figure C** indicate the specific areas of Michigan's Literacy Theory of Action to which this ELAS Guide contributes.

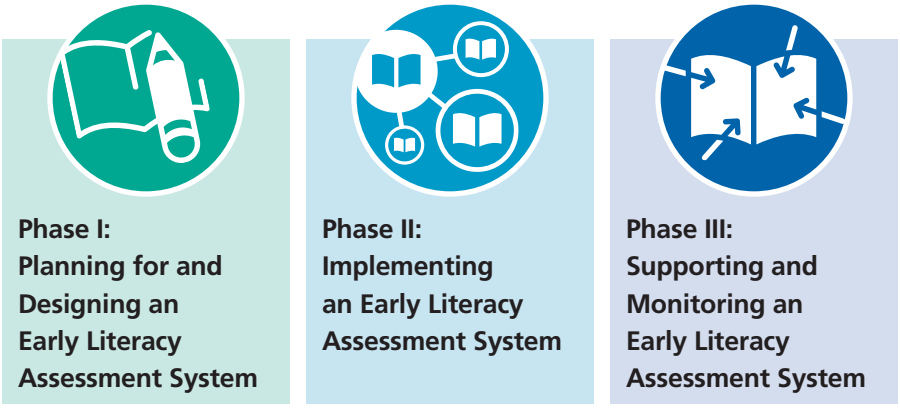


■ **FIGURE C — The green circles indicate the areas to which this ELAS Guide contributes to Michigan's Literacy Theory of Action and planned actions by the (MAISA) General Education Leadership Network (GELN) Early Literacy Task Force (ELTF).**
Source: MAISA/GELN/ELTF.

The structure of this Guide

The Guide consists of three main sections, each of which can be read on its own to meet the needs and goals of different stakeholders. The three sections also complement each other in helping the reader to understand what an early literacy assessment system should include, how it might function, and whom it would serve, as well as several of the details associated with planning for, designing, implementing and supporting such a system.

Section I presents five key **Organizing and Design Principles** to guide districts in creating an early literacy assessment system (ELAS). These five Principles need to be understood individually and collectively as districts work to create an ELAS. Each Principle includes a brief description of the major ideas that give rise to and necessitate adherence to that Principle in the design and implementation of an assessment system. The Principles are clustered in terms of three **Implementation Phases**:



Each Implementation Phase concludes with **Recommendations** for action.

Section II features a series of **Portraits** that follow the literacy development of three children from pre-kindergarten through grade 2. The Portraits were designed to provide a rich, descriptive picture of early literacy development and its assessment that simultaneously highlights aspects of each of the five Organizing and Design Principles. In the Portraits, each child enters pre-K and continues their schooling journey with a unique array of cultural and linguistic backgrounds and experiences, interests, assets, and literacy-learning needs.

Section III contains five chapters, each of which provides relevant research and supporting science related to one of the five major Organizing and Design Principles described in **Section I** and exemplified by aspects of the **Portraits** in **Section II**. Each chapter elaborates on key details and information that provide the background and justification for the related Principle and associated Recommendations provided in **Section I**. Each chapter ends with a list of suggested tools and resources that could support schools as they carry out the Recommendations described in the chapter.

The Guide concludes with a **Glossary** of assessment related terms, sets of **References** associated with the content of the Guide, and a brief description of related **literacy initiatives** across Michigan.

Who will find this Guide helpful?

The primary audience for this Guide is front-line literacy leaders who advise districts on assessment practices and tools in support of early literacy instruction:

- MDE administrators and consultants
- Early literacy consultants and coaches
- Intermediate school district (ISD) and local district consultants and assessment specialists

Additional audiences who might find this Guide useful include:

- State and local policymakers who make decisions about appropriations for assessment tools and resources (including legislators, ISD and local superintendents, and state and local school board members)
- Higher education decision-makers and faculty in teacher and administrator preparation and professional learning programs
- Education practitioners, including teachers, principals, media specialists, central office administrators, and others
- Students, families, community members, and the media
- External providers (e.g., early childhood education and care providers)

Given these potential audiences, we considered many of the critical perceptions, understandings, and uncertainties about assessment currently held by various groups who have an interest in seeing Michigan's students achieve proficiency in literacy. We concluded that for this Guide to contribute to Michigan's Literacy Theory of Action, it would need to answer the questions in **Figure D**, which fit into the implementation Phases described earlier.

■ **FIGURE D — Questions primarily answered in each Phase.**

Phase I: Planning for and Designing an Early Literacy Assessment System (ELAS)
1. What is a system of assessment? How is creating one similar to or different from choosing or buying a test?
2. How is an assessment system different from a random collection of assessments?
3. How does one help a district move beyond "choosing a test" to building an integrated and coherent curriculum-instruction-assessment model and process?
Phase II: Implementing an ELAS
4. What approaches should educators take to create assessment systems that support the development of literacy?
5. What standards articulate quality assessment practice and guide development of quality assessment systems?
6. What literature/research informs the implementation of effective assessment systems in support of early literacy development?
Phase III: Supporting and Monitoring an ELAS
7. How can a district get the most impact from the assessment it administers to students?

Notes

For an assessment system to function well, within and across levels, the system should exhibit three properties: coherence, comprehensiveness, and continuity.

SECTION I — ORGANIZING AND DESIGN PRINCIPLES, WITH IMPLEMENTATION RECOMMENDATIONS

In this section, we introduce a set of Organizing and Design Principles for an early literacy assessment system (ELAS) and provide Recommendations for developing, implementing, and supporting such a system.

Background

To begin discussion about a system of assessment, we offer an illustration of how a system might be structured and then discuss some of the principles that would make it a system rather than simply a collection of assessments. **Figure I.1**, developed by the Center for Assessment and Evaluation of Student Learning (CAESL), illustrates what a three-tiered assessment system might look like (Herman, et al., 2005). The base represents classroom-level assessment. Assessment in the classroom is typically far more extensive and frequent than that at the district level and serves multiple purposes related to ongoing teaching and learning. The middle portion of the illustration shows district assessment, which is where one often finds interim or benchmark assessments designed to gauge district-level progress at key points during the instructional year. At the top of the pyramid is state-level assessment, which is far less extensive in terms of coverage and frequency than either of the two levels below it. State-level assessment typically serves a high-level, yearly monitoring purpose.

● **FIGURE I.1**
Graphical representation of a multilevel assessment system
Source: Center for Assessment and Evaluation of Student Learning (Herman, et al., 2005)

For an assessment system like that illustrated in Figure I.1 to function well, within and across levels, the system should exhibit three properties: **coherence, comprehensiveness,** and **continuity**.

For the assessment system to support learning, it must have a quality referred to as ***coherence.*** One aspect of coherence is that the conceptual base or models of student learning underlying the various assessments within a system should be compatible. As one moves up and down the levels of the system—from the classroom through the school and district—assessments along this vertical dimension should align. As long as the underlying models of learning and development are consistent, the assessments will complement each other rather than present conflicting information and goals for learning.

By ***comprehensiveness,*** we mean that a range of measurement approaches are used to provide a variety of evidence to support educational decision making. No single assessment can be considered a definitive indicator of a student's knowledge, skills, and interests. Multiple assessments and indicators enhance the validity and fairness of the inferences drawn by giving students various ways and opportunities to demonstrate their learning.

"While Michigan law calls for a 'system' of assessment to be put into place, this 'system' cannot be just a collection of assessments. Rather, it must be a purposeful set of assessments put into place, within and across levels, with thoughtful planning and professional learning to help teachers and others use assessment productively in their ongoing activities."

Finally, an assessment system should be designed to be ***continuous.*** That is, assessments should measure student progress over time. To provide such pictures of progress, multiple sets of observations over time must be linked conceptually so that change can be observed and interpreted. Models of student progress in learning should underlie the assessment system, and assessments should be designed to provide information that maps back to the progression. Thus, continuity calls for alignment along the third dimension of time and instruction.

The system illustrated in Figure I.1 can be said to adhere to these properties to the extent that the assessments are: (a) coordinated within and across levels, (b) unified by common learning goals, and (c) synchronized by unifying progress variables. Adherence to these properties is challenging and requires considerable care and thoughtfulness in the design of the system and in the selection and implementation of the component assessments.

While Michigan law calls for a "system" of early literacy assessments to be put into place, such a "system" cannot be just a collection of assessments. Rather, it must be a purposeful set of assessments put into place, within and across levels, with thoughtful planning and professional learning to help teachers and others use assessment productively in their ongoing activities. Everyone concerned with the early literacy development of Michigan's children needs to understand the goals and purposes of the various assessments included within the system and how to use the information derived from those assessments properly and productively in their ongoing activities to support the development of literacy for all children.

Principles and Recommendations

On the following pages we present five key Organizing and Design Principles to guide districts in creating an early literacy assessment system (ELAS) that supports literacy learning. Each Principle includes a brief description of the major ideas that give rise to and necessitate adherence to that Principle in the design and implementation of the ELAS. Recognizing that building a high-quality system of assessments takes time and requires fiscal as well as human resources, we have clustered the five Principles in three Implementation Phases. Each Implementation Phase concludes with **Recommendations** for action.

PHASE I — Planning for and Designing an Early Literacy Assessment System (ELAS)

Principle #1: The ELAS must be designed to ALIGN AND INTEGRATE WITH ALL SCHOOL- AND DISTRICT-LEVEL SYSTEMS; this includes the systems of curriculum, instruction, professional learning, as well as the overall assessment system.

Principle #2: The ELAS must reflect ASSESSMENT SYSTEM DESIGN FEATURES that make it coherent, comprehensive, and continuous across time and contexts of use.

PHASE II — Implementing an Early Literacy Assessment System (ELAS)

Principle #3: The ELAS must reflect what we know from theory, research, and practice about LITERACY DEVELOPMENT.

Principle #4: The ELAS must reflect what we know about the PURPOSES, USERS, AND TECHNICAL ADEQUACY OF EARLY LITERACY ASSESSMENT.

PHASE III — Supporting and Monitoring an Early Literacy Assessment System (ELAS)

Principle #5: The ELAS must be supported and monitored by a sustained program of collaborative, inquiry-based PROFESSIONAL LEARNING and FEEDBACK.

"Everyone concerned with the early literacy development of Michigan's children needs to understand the goals and purposes of the various assessments included within the system and how to use the information derived from those assessments properly and productively in their ongoing activities to support the development of literacy for all children."

PHASE I: Planning for and Designing an Early Literacy Assessment System (ELAS)

Principle #1:
The ELAS must be designed to ALIGN AND INTEGRATE WITH ALL SCHOOL- AND DISTRICT-LEVEL SYSTEMS; this includes the systems of curriculum, instruction, and professional learning as well as the overall assessment system.

District- and school-based settings are complex ecologies that call for necessary conditions and structures that can support coherence among curriculum, instruction, and assessment systems. Establishing such coherence at the "local" level of classrooms within a school and schools within districts requires that a district have in place policies, procedures, and practices that enable the acquisition and use of an appropriate set of resources. Coherence also calls for professional learning programs and accountability practices that enable, rather than undermine, what is supposed to happen at the school and classroom levels.

The **Portraits** in **Section II** show how assessments must be aligned with each other at a conceptual and operational level. In other words, each assessment tool or practice used must focus on a clear purpose—with an intentional use for assessment results—that aligns with curriculum and instruction if it is to support the development of literacy.

Section III-1 of this Guide—**Necessary Conditions and Structures: District characteristics that support coherent implementation of an Early Literacy Assessment System**—describes and elaborates on this Principle in greater detail. It describes the state- and district-level features necessary to support development and implementation of coherent systems of curriculum, instruction, assessment and professional learning in support of early literacy development. We discuss how this work of aligning literacy assessments and building a multi-tiered ELAS is complex, to say the least. It is suggested that a significant amount of energy be placed on the alignment and integration of the ELAS. The amount of time the leaders devote to instructional responsibilities varies due to context within and across a district. However, the Wallace Foundation (n.d.) has invested in a project known as the SAM (school administration managers) process, highly recommending that principals, for example, spend 50% or more of their time related to instructional work, including assessment that informs teaching and learning.

In addition to an intentional allocation of human resources, this work needs to be distributed across many educators in the district and its respective schools through an established ELAS Leadership Team. This team oversees the practices and protocols of the organization to drive the work of developing an ELAS, from planning and designing to implementation and monitoring, ultimately creating conducive classroom conditions where assessment influences curriculum, instruction, and professional learning in literacy.

An ELAS is a necessary literacy investment that needs to be deliberately integrated with other district and school efforts. The ELAS Leadership Team can lead this effort by explicitly connecting it to the work for all educators in the organization. Far too

often, we suffer from *initiative fatigue* in our institutions (see e.g., Reeves, 2017; https://www.youtube.com/watch?v=egIcM6LRnwU). Fragmentation leads to a lack of focus and decreases efficacy and impact of the effort, leading to initiative fatigue. A carefully woven, focused approach by the ELAS Leadership Team can mitigate this common phenomenon.

To support the work of the ELAS Leadership Team, Sections III-1 and III-2 elaborate on Recommendations related to developing a logic model and theory of action to guide the process of decision making when aligning literacy assessments across schools and the district. This ensures coordination of the early literacy assessment system with other district and state tasks, leading to an equitable allocation of support in addition to high-quality classroom instruction. The ELAS Leadership Team also ensures that educators engage families in authentic, meaningful ways as part of the process of assessment.

Principle #2:
The ELAS must reflect ASSESSMENT SYSTEM DESIGN FEATURES that make it coherent, comprehensive, and continuous across time and contexts of use.

The elements of any assessment system must fit together rather than reflect disconnected pieces that don't cohere and complement each other. Therefore, the ELAS must be designed with explicit attention to important system design features if it is to function as a "system." Attention must be paid to selecting assessments that work together across contexts and purposes in ways that create **coherence, comprehensiveness,** and **continuity**. Only when designed with these features in mind will the ELAS function as a system and fulfill the intended goal of supporting early literacy development.

The **Portraits** in **Section II** illustrate the multiple aspects of literacy development that educators are interested in assessing. They provide some examples of how assessment practices and tools might reflect a rich, interconnected model of literacy development and how they can fit together across time and contexts of use in ways that are consistent with the three important system design features: **coherence, comprehensiveness,** and **continuity**.

Section III-2 of this Guide—**Assessment System Architecture: Design features needed in the structure and operation of an early literacy assessment system**—describes and elaborates on this Principle in greater detail. It briefly describes how assessment is fundamentally a process of reasoning from evidence about what students know and can do for some facet of literacy. To make this point, we use the assessment triangle from *Knowing What Students Know: The Science and Design of Educational Assessment* (Pellegrino, Chudowsky & Glaser, 2001) to describe the reasoning process and show how the three elements of that triangle—cognition, observation, and interpretation—must fit together.

Central to this entire reasoning process are theories, models, and data on how students learn and what students know as they develop competence for important aspects of a domain such as literacy. Starting with a model of development and learning is critical since it indicates the most important aspects of student development and learning about which one would want to draw inferences, and it provides clues about the types of assessment tasks that will elicit evidence to support those inferences for whatever goal one has in mind with respect to using that information.

Any valid and useful literacy assessment must therefore involve a process of reasoning from evidence about one or more key aspects of the development of reading, writing, speaking or listening. A system of literacy assessment necessarily involves multiple such assessments and includes use of the formative assessment practices. Multiple assessments would focus on key elements of the development of early literacy and would be used by various individuals to make judgments about student progress. Key ideas related to the nature of these assessments with respect to theory and data on literacy development, along with ideas about the uses and users of these assessments, are discussed in **Sections III-3** and **III-4**.

Section III-2 focuses on the broader criteria that need to be used in the process of selection and assembly of the set of early literacy assessments for them to function together, i.e., the ways they need to relate to each other to serve as a balanced "assessment system." As noted earlier, assessment systems are balanced when the various assessments in the system:

a) are coherently linked through a clear specification of the learning targets,
b) comprehensively provide multiple sources of evidence to support educational decision making, and
c) continuously document student progress over time (Pellegrino et al., 2001).

These features—coherence, comprehensiveness, and continuity—create a powerful image of a high-quality system of assessments, rooted in a common model of literacy development and learning.

Each of these three key architectural features is then described as well as important ideas related to the balancing of systems within systems. The conception of systems within systems is noted explicitly in **Principle #1** and discussed in **Section III-1**. As discussed above, the ELAS must be in balance with other school-, district-, and state-level systems related to curriculum, instruction, assessment, professional learning, and accountability. Within the assessment system there will be sub-systems that operate at different levels and serve different purposes. For example, there would be assessments designed for different purposes (see **Section III-4**) that operate at the classroom and/or district levels, as well as across levels of the Pre-K through 12 system.

Because there can be considerable complexity associated with planning for and designing an ELAS given the purposes it is intended to serve and the levels at which it is intended to operate, we describe the importance of a theory of action

in system design. To help develop and articulate a theory of action for an ELAS, it is recommended that the district's ELAS Leadership Team lay out a logic model for the assessment system. A logic model compels the ELAS Leadership Team to specify the presumed theory of action. It helps to make explicit assumptions about how particular components are supposed to work, who is to be impacted, and what the expected consequences should be and why. The logic model enables monitoring the building of the ELAS and its enactment. It also enables strategies for evaluation of the ELAS along the way and for adjustment and correction as needed. Development of a theory of action for the ELAS and a logic model for the system components and design is a challenging task that takes time; to support this process, we point to various resources available to help guide district ELAS Leadership Teams and others.

Phase I Planning & Design RECOMMENDATIONS

1.1: DISTRICT LEADERS should form an **ELAS Leadership Team** charged with guiding the Planning and Design, Implementation, and Supporting and Monitoring Phases of the ELAS.

The **ELAS LEADERSHIP TEAM** should:

1.2: Establish compatibility and coordination of the ELAS with other district- and state-level systems of curriculum, instruction, assessment, professional learning, and accountability.

1.3: Plan thoughtful strategies for engaging with families and the community as key participants in the ELAS process, both as contributors to and recipients of assessment data.

1.4: Develop and adopt a logic model and theory of action for the structure, functioning, and evaluation of the proposed ELAS.

1.5: Identify the educational decisions to be made, assessment information needed to support those decisions, and the stakeholder(s) who will be making the decision(s).

1.6: Construct a framework for the ELAS that includes clearly articulated relationships among the assessment tools and practices relative to a model of competency development in reading, writing, speaking, or listening.

1.7: Use the framework to conduct an audit of all existing district- and school-level assessment tools and practices currently in use to determine whether they meet criteria for inclusion and should remain part of the system.

ELAS Practice Tip

Who should be part of a district's ELAS Leadership Team?

Each district's team will look different, depending on the capacity and knowledge team members bring to the work.

The ELAS Leadership Team should include representation from as many as possible of the following role groups (Note: In smaller districts, it is likely that one person will carry multiple responsibilities represented here):

- superintendent/designee
- literacy specialist
- curriculum coordinator
- district assessment coordinator
- professional development leader
- early childhood specialist
- special education coordinator
- building level administrator(s)
- early childhood and K-3 teachers

Note: The work of implementing and supporting an ELAS will be helped by having an individual tasked with selecting assessments and planning a program of professional learning to support the ELAS. This professional will require resources and sufficient time to devote to continuing education specifically in the area(s) of literacy instruction and assessment.

Notes

PHASE II: Implementing an Early Literacy Assessment System (ELAS)

Principle #3:
The ELAS must reflect what we know from theory, research, and practice about LITERACY DEVELOPMENT.

Early literacy development is complex, yet understandable, given all we know from research and practice. The paths that students take to literacy involve the development of a number of competencies that are interconnected and developed across multiple contexts that include the home, the community, and the school. The competencies reflect the richness and complexity of language in both its written and spoken forms. They also reflect what we expect students to know and be able to do as they progress through learning to read, write, and speak and using the receptive and productive features of language to learn about their world—including the knowledge in each discipline (English language arts (ELA), mathematics, social studies, science, arts, etc.) deemed appropriate for success in life and society.

The **Portraits** in **Section II** provide a glimpse of three students' journeys along this path, with examples of the variation in student development that are often observed, and the ways in which home, community, and school can support each student's journey towards attainment of the literacy goals we have for students in the early primary grades and beyond.

Section III-3 of this Guide—**Literacy Development and Learning: Features of an early literacy assessment system that reflect what we know about literacy development**—describes and elaborates on this Principle in greater detail. It provides an exposition of the multiple features of a developmentally appropriate ELAS, based on what we know about the learning and development of literacy from research, theory, and practice, and grounded in contemporary definitions of literacy. For example, *Michigan's Action Plan for Literacy Excellence* defines literacy as *"the ability to read, view, listen, write, speak, and visually represent to comprehend and to communicate meaning in various settings through oral, written, visual, and digital forms of expression"* (MDE, 2017, p.8). The Educational Testing Service offers an expanded definition of literacy, including: *"the deployment of a constellation of cognitive, language, and social reasoning skills, knowledge, strategies, and dispositions, directed towards achieving specific purposes"* (Sabatini et al., 2013, p. 7). Together, these definitions embrace the broad range of processes and factors (e.g., prior knowledge, self-regulation, reading strategies motivation, engagement) that influence literacy learning and development.

DEFINITIONS OF LITERACY

"the ability to read, view, listen, write, speak, and visually represent to comprehend and to communicate meaning in various settings through oral, written, visual, and digital forms of expression"

— MDE, 2017, p.8

"the deployment of a constellation of cognitive, language, and social reasoning skills, knowledge, strategies, and dispositions, directed towards achieving specific purposes"

— Sabatini et al., 2013, p.7

Aligned with these definitions of literacy, we identify and explain features of an early literacy assessment system that reflect what we know about literacy development. We propose an early literacy assessment system that:

- is developmentally sensitive
- identifies whether students are receiving excellent early instruction
- identifies students who may have risk factors so that they receive effective literacy intervention programs as early as possible
- yields information that is useful to guiding teacher decision making so that literacy instruction can be tailored to the various profiles of strength, challenge, and interests that students present
- is informed by the range of processes and factors that explain literacy achievement
- takes into consideration the complexities of reading comprehension and reflects the dynamic and developmental nature of comprehension
- provides information on students' interests so that educators can use this information in planning instruction, and takes students' interests into account when reporting assessment results
- applies an asset orientation motivated by the question, "What knowledge and skill is the learner bringing to the table?"

Also in **Section III-3**, we explicate the proposed features of an early literacy assessment system by:

a) describing research, theory, and practice that support each feature,

b) identifying ways in which the features are illustrated within the **Portraits** in **Section II,** and

c) identifying tools that can be adopted or adapted for the purpose of helping practitioners to evaluate an existing literacy assessment system and to design a literacy assessment system that reflects the features.

Principle #4:
The ELAS must reflect what we know about the PURPOSES, USERS, AND TECHNICAL ADEQUACY OF EARLY LITERACY ASSESSMENT.

A variety of assessments are administered to students in schools, all with the same goal: to move student learning forward. The purposes of these assessments range from school reform efforts to identifying students who need supplemental instruction to discovering students' current understanding in the classroom. As such, assessment data is often at the center of many conversations in schools. However, these conversations can easily go awry when the roles and proposed decisions of various users or the technical adequacy of the data to support those decisions are unclear or there is a lack of shared understanding.

The **Portraits** in **Section II** provide examples of assessments reflecting multiple components of literacy development, including word knowledge and decoding, comprehension, production of spoken and written language and discourse, and others. They also illustrate how the users of those assessments can vary, as can the purposes for which they use specific literacy related assessments.

Section III-4 of this Guide—**Purposes, Users, and Desirable Properties of Assessments: Features of early literacy assessments that reflect what we know**—describes and elaborates on this Principle in greater detail. It discusses how prior to collecting assessment results, educators who use those results need a shared understanding of who uses them, what they use them for, the evidence that supports the desired decision, and what the results indicate. It details ways to clarify each of these four considerations.

1. First, we describe several typical users of assessment data and their roles in using that data to move student learning forward.
2. We then provide a list of specific questions that different assessment data can and cannot address and the decisions that can be made with the assessment data. We highlight the importance of understanding that assessment data should be used only as intended, since different types of scores reported from a single commercial assessment are designed and validated to address specific questions.
3. Next, we present the concept of technical adequacy (reliability, validity, and fairness). We draw upon research to specify the technical adequacy criteria needed to evaluate the quality and appropriate use of data. Responsible use of assessment data requires that users know the evidence that either supports or does not support the decisions made based on the results. Higher stakes decisions require higher levels of evidence (i.e., technical adequacy). Even lower stakes decisions require sufficient levels of technical adequacy.
4. Finally, responsible use of data requires that assessment users can describe the aspects of literacy that an assessment does and does not measure. Understanding the aspects of literacy an assessment reflects and how that fits with other aspects of literacy in a developmental continuum is necessary to prevent common assessment-related mistakes like teaching to the test, narrowing the curriculum, and misdiagnosing the root of literacy difficulties.

Section III-4 provides a crosswalk of the users of assessment data with the specific decisions they make, and it addresses the properties of technical adequacy needed for those decisions. We also illustrate this connection with specific examples of commonly used literacy assessments in schools and point to additional resources helpful in identifying quality assessment tools and information.

Because the formative assessment process, frequently referred to as *assessment for learning*, is so critical in supporting the development of literacy, we include two sets of resources related to that process. The first is a formative assessment planning template and the second is an illustration of the application of the formative assessment process to a segment from the **Portraits** in **Section II**.

Phase II Implementation RECOMMENDATIONS

2.1: The **ELAS LEADERSHIP TEAM** should use the logic model and theory of action (called for in Phase I) to guide the selection and implementation of assessment *tools and resources for inclusion in the system.*

To accomplish Recommendation 2.1, the **ELAS LEADERSHIP TEAM**, in collaboration with **PRINCIPALS AND TEACHERS**, should:

2.2: Select individual assessment resources on the basis of evidence of their capacity to provide construct-relevant and instructionally valuable information about a student's literacy development and growth in a given literacy domain—reading, writing, speaking, or listening.

2.3: Select individual assessment resources on the basis of evidence that they are developmentally appropriate and respectful with regard to the cognitive, social, emotional, cultural, and performance demands they place on children.

2.4: Select individual assessment resources on the basis of evidence of appropriate levels of technical quality with respect to validity, reliability, and fairness given the intended interpretive use(s) and the potential consequences for students:

2.5: Provide technical assistance and guidance to the system's various assessment users to help ensure that they can select assessments that best meet their information needs and then use the results from those assessments in appropriate and technically defensible ways.

PHASE III: Supporting and Monitoring an Early Literacy Assessment System

Principle #5:
The ELAS must be supported and monitored by a sustained program of collaborative, inquiry-based PROFESSIONAL LEARNING and FEEDBACK.

Educators at all levels of the educational system need to be assessment literate and possess disciplinary knowledge about literacy (reading, writing, oral language) to use assessment information effectively to support all learners. Particular emphasis needs to be given to assessment literacy focused on understanding and implementing effective classroom formative assessment practices for early literacy. To accomplish this, all educators need to engage in a sustained program of collaborative, inquiry-based professional learning.

Moreover, students and the broad range of adults who support them (families, community members, and local policymakers) can benefit from having knowledge, dispositions, and skills that help them become stronger supporters of and decision-makers for quality assessment systems and informed users of assessment data. Schools should embrace opportunities to develop assessment literacy among students and the adults who support them.

The **Portraits** in **Section II** show that curriculum, instruction, and assessment must function interdependently as a coherent system. A coherent system is enabled and mediated by the continuous learning and improvement of educational professionals in schools and districts.

Section III-5 of this Guide—**Professional Learning Programs: Features that support stakeholder groups in implementing and using an ELAS**—describes and elaborates on this Principle in greater detail. It focuses on collaborative inquiry, which is a recursive and systematic process involving six phases through which educators explore issues about their practice and their students' literacy learning. It provides educators with the necessary structure and processes to explore their wonderings to determine evidence-based resolutions through dialogue, data analysis, new learning, experimentation, coaching, feedback and reflection. Collaborative inquiry is also an essential strategy for advancing equity; those engaged in inquiry not only deepen their content knowledge and pedagogy but also increase their understanding of student culture, language, and background and their impact on assessment. They also learn how to use assessment information to guide their future actions.

Section III-5 also describes the purposes of each of the six phases of the collaborative inquiry cycle and illustrates through example how each phase aligns with assessment literacies that educators need to effectively use assessment and create assessment systems that support literacy practices. The value of engaging educators in continuous cycles of collaborative inquiry rests on six assumptions drawn from methodologically strong studies of the basic principles for designing professional learning that influences educator practice and student performance (Desimone, 2009).

School and district leaders and policymakers should consider these **six driving assumptions** when designing their professional learning:

1. Professional learning is an active process.
2. Professional learning allows for educator agency.
3. Professional learning is relevant and content-specific.
4. Professional learning is situated in cultures of collaboration.
5. Professional learning is sustained.
6. Professional learning requires organizational systems and structures of support.

We also argue that collaborative, inquiry-based professional learning will only accomplish its goals if educators are provided with adequate time to meet with colleagues; with experienced facilitators to guide educators in the collaborative inquiry process; and with coaches, teacher leaders, and school and district leaders to support the implementation of educators' new learning into practice. Time and opportunity must also be made to engage in two-way information sharing and construction of knowledge with students and their families.

Section III-5 also emphasizes the need to monitor and evaluate the quality, utility and effectiveness of the professional learning program. When investing time, effort, and resources in the implementation of any such program of professional learning and system support, it is important to clearly articulate a formative evaluation plan that includes ongoing monitoring and feedback from the field about efficacy and effectiveness.

Phase III Support and Monitoring RECOMMENDATIONS

3.1: The **ELAS LEADERSHIP TEAM** should use the logic model and theory of action to develop plans for professional learning and formative evaluation of the ELAS.

To accomplish Recommendation 3.1, the **ELAS LEADERSHIP TEAM,** in collaboration with **PRINCIPALS AND TEACHERS,** should:

3.2: Gather information about the current level of knowledge and capacity related to literacy, assessment, and professional learning (strengths and gaps) among staff (teachers, administrators, coaches), students and their families, and local policymakers, and use these data to guide the implementation and support of an ELAS.

3.3: Create a cohesive master professional learning plan (aligned to the Michigan's *Professional Learning Policy* and associated *Standards for Professional Learning*) to support all stakeholders responsible for early literacy development and assessment. The plan should address early literacy development and assessment and meet the learning needs of children and instructional needs of teachers based on evidence of need as well as research.

3.4: Budget for and plan to provide substantive resources and support for content-focused professional learning about early literacy development and assessment that is collaborative, intensive, sustained, and job-embedded.

3.5: Participate in statewide efforts to prepare, support, and generate teacher leaders and instructional coaches to promote effective early literacy development and assessment practices, with an emphasis on the use of classroom formative assessment practices.

3.6: Develop a plan for formative evaluation of the ELAS that includes ongoing monitoring and feedback from the field about the quality, utility, and effectiveness of the assessment system as it is implemented and becomes operational.

Notes

Children take different paths toward literacy, yet a balanced early literacy assessment system (ELAS) can serve each and every individual child.

SECTION II — PRINCIPLES IN ACTION: PORTRAITS OF STUDENT EXPERIENCE

This section features a series of **Portraits** that follow the literacy development of three children from pre-kindergarten (PreK) through grade 2. The **Portraits** have been designed to illustrate different paths that these children take toward literacy, while simultaneously showing how a balanced early literacy assessment system (ELAS) can serve individual children. In the **Portraits**, each child enters PreK and continues their schooling journey with a unique array of cultural and linguistic backgrounds, experiences, interests, assets, and literacy-learning needs. You will see examples of ELAS features as framed in this Guide's five Organizing and Design Principles.

How to learn from these Portraits

These **Portraits** are designed to illustrate how some of the theories and principles recommended in this Guide might be applied by teachers in classrooms to respond to the literacy-learning needs of students.

As you explore and vicariously live through the experiences of the teachers and their students, reflect on the components of the assessment system that enable the district, and the teachers within the district, to serve the needs of students. Also attend to the larger systems within the district that make the early literacy assessment system effective in supporting the learning needs of students.

How to interact with the Portraits as you read

Examine the **Portraits** with colleagues and share your different insights and perspectives. Much can be learned from such dialogue and reflection. Also, consider how the particulars of the **Portraits** might generalize to situations you have encountered or could encounter.

ONE CAUTION

The Portraits are not intended to prescribe a single approach or to describe every role assessment plays in an effective literacy instruction and intervention program. Nor do the Portraits attempt to describe every possible context or scenario a teacher might face.

As you study the Portraits consider the following:

Overgeneralization. These three **Portraits** cannot possibly depict the individual needs of all students and educators. Nor can they represent the full range of students' strengths and areas of needed growth. Despite these limitations, we do encourage practical application to your own experiences and the experiences of the children you serve as you see them reflected in the **Portraits**.

Context matters. Each school, district, and community has a unique context. These **Portraits** represent a limited number of contexts with an understanding that staffing, access to materials and resources, and background knowledge of educators can vary greatly. As mentioned, we urge that you take into consideration the similarities and differences of the classroom, school, and community contexts.

Diverse learners. Every child has a unique background, set of experiences, and assets that they bring to their learning. The authors of this work made conscious choices to select students with diverse backgrounds, races, and needs. We aim to acknowledge this diversity within the **Portraits,** while not stereotyping students who are often marginalized.

How to interact with the Portraits as you process

The analytic process is at the heart of reading these **Portraits**. You are encouraged to get below the surface of the cases to see how relevant theories and practices are applied in real situations. Engaging collectively in an analysis of each **Portrait** will help you and your colleagues prepare for the *real* world where you are in constant action, making decisions.

Questions are provided below to guide analysis. As you dialogue about what you observe in the **Portraits**, listen to what others share, offer different perspectives, and deliberate points of view. Consider what you would have done in a similar situation. How is it similar to or different from what was done in the **Portraits**? Reflect on how you react to what you read. What does it say about your own assumptions and attitudes? The goal is for you to take away from this collective process a deeper understanding of the various ways teachers and other service providers engage in developmentally sensitive assessment. Remain open to the possibility of changing or broadening your own beliefs about teaching and learning. Adopting very different ways of engaging with the **Portraits** can also help you think differently about such issues in your own practice.

- First, try reading a **Portrait** rather quickly to get a general idea of what it is about: What happened? Which assessment processes and tools were used? How did teachers use the data to inform subsequent decisions?
- Then go back and read the **Portrait** again, this time more carefully. Begin to reflect on the questions below. Ask questions you have about the material and identify additional information you would like to have had that is not presented in the **Portrait**.

Questions to guide dialogue about the Portraits:
1. Is there evidence of coherence, comprehensiveness, and continuity of the overall assessment system, including assessment for learning and assessment of learning?
2. How do the teachers use assessment data/information to design individualized and small-group instruction?
3. What additional data/information did the teachers collect to develop and implement instruction and targeted interventions? Who else was involved in gathering data and designing interventions?
4. What mechanisms do you see for gathering information about children that go beyond what is typically thought of as "assessment"?
5. How are the teachers regularly exchanging data with colleagues and families?
6. What evidence is there that teachers engage students in the formative assessment process as described in the Formative Assessment Process Vignette? Where else might they have engaged students in the formative assessment process?
7. What district- and school-level systems support conversations and collaboration around teaching and learning based on data?
8. What examples in the Portrait show teachers using asset-based beliefs?
9. How might this dialogue influence your assessment practices in support of early literacy?

Introduction to the three children

This series of **Portraits** follows the literacy development, assessment, and instruction of three children – Emma, Ayesha, and Emmanuel – from pre-kindergarten to second grade. Each child enters pre-kindergarten and continues their schooling journey with a unique array of cultural and linguistic backgrounds, experiences, interests, assets, and literacy-learning needs. Throughout each of their school-based, early literacy learning experiences, their teachers and a constellation of other service providers strategically employ a variety of methods of observation and assessment of the children's literacy skills and practices in order to build upon their assets and target areas for needed growth in reading, writing, and oral language. The **Portraits** illustrate the many ways that children's literacy knowledge and skills can vary even when they are the same age. Furthermore, these **Portraits** illustrate the multiple contexts in which educators can acquire information that is useful in planning instruction.

It is important to note that this series of **Portraits** does not attend fully to all aspects of the three children's literacy development. Rather, the **Portraits** focus primarily on reading development, instruction, and assessment, with only limited attention to writing and oral language development. This does not suggest, however, that classroom teachers and other service providers should not provide systematic assessment and instruction in these crucial areas of literacy development in pre-K-3 classrooms.

Emma

Emma's family owns a local diner, where Emma loves to help out. She is very social with her classmates and loves to draw and perform. Emma also enjoys participating in read-alouds and songs during class, and is enthusiastic about sharing her ideas about books, both orally and through drawing detailed pictures. She loves for her family and teachers to read aloud to her many different kinds of books. Emma also likes reading with her friends in class.

Ayesha

Ayesha enjoys riding her bike, playing outside, playing with dolls, and building with Legos. Ayesha loves dogs and wants to be a "doctor for pets" when she grows up. Although she is very quiet during most class activities, she enjoys playing with her classmates. Ayesha seems to enjoy all class activities, listens attentively, and likes to read the books her teachers give her, especially books about animals.

Emmanuel

Emmanuel's family is originally from Haiti and, like his family, Emmanuel speaks Haitian Creole fluently in addition to speaking English. Emmanuel and his parents speak mostly Haitian Creole at home. He can be reserved around his classmates but becomes more animated and social when engaged in his favorite activities with friends. He is especially interested in superheroes and insects. Emmanuel is motivated by extra projects that extend what he is learning in class.

Throughout the **Portraits** and in other areas of this Guide, you will see references to Tiered Instruction or Interventions (i.e., Tier 1, Tier 2, Tier 3). This language comes from the Response to Intervention (RTI) model. The heart of any RTI model lies in the use of tiered instruction. In the RTI framework, the instruction delivered to students varies on several dimensions that are related to the nature and severity of a student's difficulties.

- All students in Tier 1 receive high-quality, scientifically based instruction, differentiated to meet their needs, and are screened on a periodic basis to identify struggling learners who need additional support.
- In Tier 2, students not making adequate progress in the core curriculum are provided with increasingly intensive instruction matched to their needs on the basis of levels of performance and rates of progress.
- In Tier 3, students receive individualized, intensive interventions that target the students' skill deficits for the remediation of existing problems and the prevention of more severe problems.

Portraits

Pre-Kindergarten

Portrait of a Model Assessment System: PRE-KINDERGARTEN

AUGUST (BEFORE PRE-KINDERGARTEN BEGINS)

Meeting and Learning about Children and Families: Initial Picnic

Three families, those of four-year-olds Emma, Ayesha, and Emmanuel, are looking forward to their children starting pre-kindergarten in a local school in the fall. The families are invited to a Sunday afternoon picnic in a neighborhood park at which they have the opportunity to meet their children's teachers, school staff, and other families. Teachers circulate during the picnic, meeting and beginning to learn about each child and their family. For example, Ms. MacDonald, who is Emma's, Ayesha's, and Emmanuel's teacher, learns that Emma's family owns a local diner and Emma loves to help there. Ms. MacDonald notices that Ayesha is playing with her dolls, which her mother noted is her favorite activity. Ms. MacDonald learns that Emmanuel's family is originally from Haiti and that, like his family, Emmanuel speaks Haitian Creole in addition to speaking English. Even before the start of the school year, these conversations with and observations of the children and their families at the picnic serve as valuable data sources about the children's experiences and interests, to which Ms. MacDonald will connect in her instruction throughout the year.

Following the picnic, Ms. MacDonald takes some notes about what she learns about each family and child in a data binder she has created using her class list. The binder has a section for each child, as well as a section with many tables containing rows labeled for each child and specific standards (or components) to be observed heading each column. There are also blank pages for notetaking, which she will continue adding to throughout the year.

Learning about Families and Communities: Home Visits

Emma's, Ayesha's, and Emmanuel's families alert them that one of their teachers is going to visit with them before school starts. Ms. MacDonald and her classroom's support teacher, Mr. Wilmac, conduct home visits (which can be at home or at a location of the family's choosing, such as a local park or community center) with each child during the month leading up to the start of school. To make these visits more manageable, they split the class list and take structured notes they share with one another following the visits. During the visit, Ms. MacDonald and Mr. Wilmac have a protocol they follow, which was developed during a school-wide cultural proficiency training, although they are comfortable adjusting as needed. The protocol involves conversation with the child and with the family. It involves the teachers sharing about themselves, as well as inviting the child and family to share about themselves. Activities include the child providing a tour of the home or neighborhood location, sharing favorite objects and activities, and talking about what the first day of school will be like. As soon as possible after the visit, Ms. MacDonald and Mr. Wilmac take notes on what they learned. In the context of both the picnic and home visit, the teachers focus on learning what the child and family know and can do, rather than on what the child or family does not know or cannot do, and they begin to develop an inventory of the family's and child's interests and cultural assets.

Portrait of a Model Assessment System: PRE-KINDERGARTEN

SEPTEMBER

Initial Observations in a Classroom Setting

Emma, Ayesha, and Emmanuel arrive for their first day of school with a mixture of nervousness and excitement. Wanting their first weeks at school to be as comfortable for the children as possible, Ms. MacDonald and Mr. Wilmac do not administer any formal or informal assessments in the first weeks of school. However, they observe the children carefully throughout the day. These observations are guided by teachers' deep knowledge, gleaned through preservice teacher preparation and ongoing professional development, in four areas:

1. the State's Early Childhood Standards of Quality;
2. the Head Start Outcomes Framework 2015;
3. the observation forms (and other assessment tools/processes adopted by the district) that are part of their curriculum, which not only align to but also unpack and extend what is in the Head Start Outcomes Framework; and
4. their knowledge of criteria for requesting Tier 2 support services for children (e.g., speech and language intervention, intervention for emotional and behavioral needs).

Teachers record key observations in their data binder.

This year, as every year, Ms. MacDonald and Mr. Wilmac spend some time early on explaining to their students the many different ways that children write (e.g., scribbling, making some lines). Having reassured children that many different ways of writing are just fine, they begin having children sign in each morning as part of their classroom entry routine. The teachers explain that this will help them quickly know who is here and who is absent, and they talk about jobs where grown-ups sign in, too. Ms. MacDonald and Mr. Wilmac put the first two days of sign-in sheets in the data binder and look forward to the yearly tradition of reviewing with children and families how the children signed in at the beginning of the year compared to how they do so at the end of the year. The teachers also record each child retelling a story read aloud to them, selected from the classroom library, which includes a variety of texts that reflect the cultural backgrounds and interests of students in the classroom. Children enjoy watching themselves on video, and the teachers appreciate having a record of each child's retelling skill to inform their planning, as well as to support a comparison to a retelling at the end of the year.

Portrait of a Model Assessment System: PRE-KINDERGARTEN

OCTOBER – MAY

Vision and Hearing Screening

It is now early October and Emma, Ayesha, and Emmanuel are settling into the classroom well. Mr. Wilmac explained at circle time that the next day the children will have a chance to meet with a real nurse who will see how their eyes and ears are working. Mr. Wilmac introduces the terms *vision* and *hearing*, which he reinforces throughout the week, and shows a video so children can see what it will be like to have their vision and hearing checked. All three children are very engaged during the vision and hearing screening process (none showed signs of vision or hearing problems). For the next two weeks, Ms. MacDonald and Mr. Wilmac have part of the dramatic play area set up to be a nurse's office with (play) equipment for vision and hearing screening. Emma and Ayesha enjoy playing in that center.

Continued Observation

Throughout the year, Ms. MacDonald and Mr. Wilmac continue to observe children regularly both during teacher-initiated and child-initiated activities. Some of these observations are recorded in prose in each child's section of the data binder. Other observations are translated into "check-offs" on the tables in the binder that list children's names as row headings and specific standards (or components) to be observed as column headings. The teachers also have a goal of talking with a family member of each child at least twice per month. This is not difficult to achieve for the family members who do classroom pick up and drop off, but for those children who ride the bus or go to curbside pickup, it is more difficult. Ms. MacDonald and Mr. Wilmac split responsibility for calling those families. They take notes on sticky pads during or shortly after these conversations and add to the data binder any sticky notes with particularly useful information (e.g., Emma has ear infection—her mother says she gets them "all the time"; Emmanuel has become very interested in insects) to ensure that the children's and families' voices are reflected.

In early November, during a series of meetings in which Ms. MacDonald and Mr. Wilmac go through the data binder section for each child (see **Planning** next page), they discuss Emma's continued challenge with unclear speech and note that recognizing and generating rhyming words remains difficult for her. Using the district guidelines for Tier 2 service referral, they decide to request an evaluation for speech and language pathology (SLP) support services. The SLP determines that Emma does in fact qualify for services. She begins seeing Emma twice per week and also provides the teachers with a bulleted list of recommendations for things they can do in the classroom to support Emma's development. They meet with Emma's family to share that information.

Portrait of a Model Assessment System: PRE-KINDERGARTEN

OCTOBER – MAY *continued*

Assessments or "Games"

Sometimes, Ms. MacDonald and Mr. Wilmac need to have more systematic and psychometrically sound information to use in combination with observational data in order to use both sources of data to inform their instruction. For these situations, Ms. MacDonald and Mr. Wilmac have a set of valid and reliable assessments that are designed for four-year-olds. For example, they have a phonological awareness assessment designed for four-year-olds that they administer only to children whom they are concerned may be making little progress in this area. Some weeks, one of the center experiences available to children is to sit with Ms. MacDonald or Mr. Wilmac to play "games" that are these assessments. The teachers invite to this center children they are particularly interested in assessing. (There are games in math and science, and Social and Emotional Learning as well.) Ms. MacDonald and Mr. Wilmac explain that they check off different parts of the game on their clipboard as they play them. The clipboard holds tables from the data binder, which Ms. MacDonald and Mr. Wilmac return to the binder at the end of the session. Emma and Ayesha love the one-on-one time they get with their teachers during game time. (Emmanuel plays at other centers during this time.)

Planning

Ms. MacDonald's and Mr. Wilmac's district ensures that they have one hour per day of collaborative planning time. The district encourages the use of some of these planning hours for what they call "data days," on which teachers use the information in their data binders to inform their planning of whole-group, small-group, and individual lessons. For example, the curriculum with which they are working includes an opportunity to read aloud a book of their choice each afternoon. The teachers sometimes select books for that time that provide opportunities for instruction in an area that has arisen as a need across many children (they have other reasons for selecting, or encouraging children to select, books for this time) and that reflect the interests and cultural backgrounds of students in their classrooms. The curriculum also provides an opportunity to do small-group review sessions each Friday, which the teachers plan based on who needs additional support to achieve particular standards. The teachers also make a "look-out list" that informs opportunities to teach, observe, or assess when they are circulating during center time and other parts of the day. For example, they note the need to "look out" for opportunities to develop Emma's understanding of a letter versus a word and to "look out" for an opportunity to obtain another retelling from Emmanuel to see how that skill is coming along.

Conferences

Twice during the year, the school holds family-teacher conferences, in which teachers meet one-on-one with each child's family member(s) for an extended conversation about the child's progress and next steps for development. The central document for this meeting is the parent report from the ongoing comprehensive child assessment.

Portrait of a Model Assessment System: PRE-KINDERGARTEN

JUNE

Celebrating Growth

Emma, Ayesha, and Emmanuel are looking forward to an end-of-year party to celebrate how much they have learned during the year. Each child prepares a booklet called "How I've Grown!" The booklet includes the child's own drawings and dictated writing about what they have learned that year (e.g., Emmanuel learned that "It's good to share with friends"). Ms. MacDonald and Mr. Wilmac also provide recommended materials for children to include in their booklets, such as a copy of the child's name-writing at check-in from the beginning and end of the year and photographs of children engaged in science learning. Each booklet ends with things the child hopes to learn in kindergarten. Each child practices sharing their booklets, so they will be ready to do so with their family members.

Finalizing Data Binders

Although there is no formal end-of-year assessment, teachers make sure that each child's section of the data binder is up to date and reflects descriptive information about the child as well as information about where that child is in relation to specific standards or components of standards. Teachers use this information for two purposes: one is sharing with kindergarten teachers (see below); the other is providing information for a meeting in which teachers reflect on things that went well this year and areas they'd like to improve in their teaching the following year.

Data Sharing

Not all children in pre-kindergarten in the district move on to kindergarten, but many do. For those who do move on, teachers pass along not only a child's electronic reports from the ongoing assessment but also the section of the data binder and tables in which the child is included. The teachers take a few minutes to highlight some key information about each child that they think will be useful to next year's teacher. Ms. MacDonald and Mr. Wilmac complete a form that highlights key information about each child that they think will be useful to pass along to next year's teacher. They also include their school contact information in case the children's kindergarten teachers have any questions about the information on the form or data binder. Emma, Ayesha, and Emmanuel are each staying in the district and are looking forward to being "big kindergartners."

Kindergarten

Portrait of a Model Assessment System: KINDERGARTEN

AUGUST – SEPTEMBER

Reviewing Data; Meeting and Learning about Children and Families: Phone Calls and "All About Me" Activities

At the start of the school year, kindergarten teachers for Emma, Ayesha, and Emmanuel begin by getting to know children as readers and writers. Before the children arrive at school, they review the children's electronic files, as well as the data binders they received from their pre-kindergarten (PreK) teachers. When they have questions about the data binders or the end-of-year student data sheet from the PreK teachers, they follow up with the teachers.

During the first month of school, the kindergarten teachers focus on getting to know the students in their classrooms. They engage the children in "All About Me" activities in which children can share more about their backgrounds, out-of-school interests, favorite topics, and even their learning goals for kindergarten.

Teachers also call each family at home in the evening to learn more about children's interests, their strengths, and the parents' goals for—and any concerns about—children's learning in kindergarten.

They learn that Emma loves to draw and that she says she wants to learn to read in kindergarten. Her teacher learns, from data collected in PreK and from the discussion with Emma's parents, that she has been receiving Tier 2 speech and language pathology (SLP) service in PreK. At an individualized educational program (IEP) meeting scheduled early in September, it is determined that Emma will continue to receive speech and language services during her kindergarten year.

Ayesha's kindergarten teacher learns that she enjoys riding her bike and playing outside. She loves dogs and wants to be a "doctor for pets" when she grows up. She likes to build with Legos during her free time. She says she wants to learn how to tie her shoes in kindergarten. Her parents share that they try to read aloud with Ayesha every day at home, but they are concerned because Ayesha often expresses disinterest or tries to engage in another activity in the middle of the book.

Emmanuel's teacher learns that he loves to play pretend superhero games, and he enjoys listening to books and fantasy stories. He says he wants to learn multiplication in kindergarten and do homework like his big sister. His parents share that he is very interested in reading. He points out letters on signs he sees outside the window whenever his family is in the car. Because Emmanuel's parents share that they primarily speak Haitian Creole at home, the school's English language teacher administers the WIDA-ACCESS Placement Test (Kindergarten W-APT) to determine whether Emmanuel needs English language supports. Based on his scores, he does not qualify for additional language supports at this time.

Portrait of a Model Assessment System: KINDERGARTEN

AUGUST – SEPTEMBER *continued*

Assessments or "Games"

The children participate in the fall computer adaptive benchmark assessment that provides a reliable and valid screening score to identify children who may need additional Tier 2 literacy supports. Emma's scores are below what the school typically expects at the start of school, but it is decided to allow some time for her classroom teacher to work with her and to continue to observe her progress until the January screener. Ayesha and Emmanuel's scores are at or above expectations for children at the start of school. Early in the school year, the children's kindergarten teachers use a variety of assessment tools to understand children's literacy development. While the rest of the children are engaged in independent work at play centers, teachers meet with each child individually at a table, inviting the children to play reading "games."

The teacher plays a game where she shows children letters and they tell her the letter names for lower and upper-case letters, letter sounds, and a word that "starts with the sound that the letter makes." Emma can identify the letter A from her name. She says A is for Emma. She also recognizes eight other uppercase letters. She says "I don't know" for the rest of the letters. Her teacher discontinues the assessment after showing her ten more letters.

Ayesha can correctly identify and name all upper-case letters. She names most lower-case letters but says "don't know" for: e, g, h, i, l, n, q, r, y. She can provide sounds and words for seven upper-case letters: B, C, D, K, P, S, T.

Emmanuel can correctly name all of the upper- and lower-case letters. He correctly identifies words and sounds for most letters. He says /s/ for C and when prompted for another sound does not include the /k/ sound; he then says "sad" for a word that starts with C. He says /w/ for Y and then says "water" for a word that starts with that letter. He says "don't know" for words that start with X and Q. He identifies vowel letter names. He says that A makes the /ă/ sound. He does not know sounds for the rest of the vowels.

The teacher plays some word games with each child to learn more about the children's phonological awareness. She wants to determine whether children can rhyme words and whether they can blend and segment phonemes in one-syllable words. Emma has difficulty producing rhyming words, but she can say "that rhymes" when her teacher says the words. She giggles when her teacher works on segmenting/blending words but is not able to segment or blend independently yet. Ayesha easily produces rhyming words, blends words when her teacher talks in a robot voice, and segments first and last sounds (but not middle/vowel sounds). Emmanuel easily produces rhyming words and correctly blends and segments one-syllable words.

Portrait of a Model Assessment System: KINDERGARTEN

AUGUST – SEPTEMBER *continued*

Initial Observations in a Classroom Setting

Children draw/write regularly over the first month of school. Their teachers examine their writing to understand more about their letter-sound knowledge and writing development in order to inform instruction. Emma draws detailed pictures, writes strings of letter-like symbols on her page, and describes her pictures in detail when asked to tell what she wrote. Ayesha draws quickly, writes in upper-case letters, and attempts to represent first consonant sounds in words. She provides a brief description of her work but cannot always remember the exact words she wrote to "read" them back. Emmanuel draws detailed pictures, represents first and last sounds in words, and tries to read back his writing, but sometimes he cannot remember exactly which word he was trying to write.

Children begin to learn some common songs and rhymes. The children's kindergarten teachers put the words for these rhymes on large chart paper and point as the children read along. After the first week, they invite different children to take a turn holding the pointer each day. The teachers take notes to see whether children are pointing to one word for each word that the class sings/chants. Emma is not sure where to point, and she needs the teacher to help her move the pointer from left to right and to touch each word. Ayesha moves the pointer from left to right. She starts by pointing to one word at a time, but she gets confused as the children chant quickly. Emmanuel moves the pointer from left to right, touching each word as the class says it.

OCTOBER – MAY

Planning

The children's kindergarten teachers use data collected in September and start to meet with children in needs-based reading groups. Children practice skills and then have opportunities to apply what they have learned in real reading contexts.

Emma's kindergarten teacher works with her and several other students on blending and segmenting consonant-vowel-consonant (CVC) words using Elkonin boxes with tokens and letters. She also uses sound/letter picture sorts, along with building CVC words and reading these CVC words in sentences that the teacher writes. She also engages this small group in scaffolded writing opportunities in which children try to write the first sound in words.

Ayesha's teacher works with her in a group that is focusing on learning the consonant and vowel letter-sound relationships that they do not already know. Ayesha practices reading short books every day, and her teacher asks her to notice words that include the new sounds she is learning. The teacher focuses on helping this group to identify and represent vowel sounds in their writing.

Emmanuel is part of a small group of students who review the consonant sounds that are not yet secure but focus primarily on learning short vowel sounds. Emmanuel practices reading short books every day, and his teacher asks him to notice words that include the new sounds he is learning. The teacher focuses on helping this group identify and represent vowel sounds in their writing.

Portrait of a Model Assessment System: KINDERGARTEN

OCTOBER – MAY *continued*

Planning *continued*

In addition to needs-based, small-group work, all children have lots of opportunities to engage with text. Their kindergarten teachers read aloud throughout the day to support children's learning about literature, science, social studies, mathematics, and the arts. Their classes discuss the ideas in these texts and talk about the meanings of new words. Their classes continue to read along as they sing songs and learn rhymes and chants. The children write often throughout the day individually, and their teachers often record on the white board children's words and ideas when they contribute to a conversation.

Continued Observation

As the children engage in small-group and class-wide literacy activities, their teachers take observational notes or use checklists to monitor how the children's literacy is developing towards meeting kindergarten ELA and literacy standards. Analysis of these data enables the children's kindergarten teachers to learn that:

Emma loves to participate in read-alouds and songs. She is enthusiastic about sharing her ideas about books, but her speech can be unclear and other children may need to ask her to repeat what she is saying. She is now writing strings of real letters and continues to draw very detailed pictures.

Ayesha seems to enjoy all class activities and listens attentively, but she is very quiet. She rarely participates in whole-class discussions. She is starting to write in lower-case letters and represents end sounds in words. She likes to practice reading the books that her teacher gives her, and she can read and point along with these simple texts.

Emmanuel loves to participate in read-alouds and songs. He is enthusiastic about sharing his ideas about books. He has started representing vowel sounds in all of the words he writes. He likes reading books he chooses from the class library to other friends in the class.

Assessments

As the year progresses, the children take computer adaptive assessments in January and May. Data from these assessments are considered in conjunction with the teachers' observational notes and informal assessments to determine whether students need additional supports. In January, Emma' scores are at the 10th percentile for phonological awareness, the 15th percentile for letter knowledge, and the 75th percentile for language comprehension. These scores qualify Emma for Tier 2 reading instruction in addition to continued speech services. From February through June, this Tier 2 instruction focuses on supporting Emma to develop her phonemic awareness, letter-sound knowledge, and early word reading.

Ayesha's scores are at the 75th percentile for phonological awareness and at the 80th percentile for letter knowledge. Her score is at the 55th percentile for language comprehension, which does not indicate a need for additional support at this time.

Emmanuel scores above the 85th percentile for all subscales. These data align with the teacher's observations that he is well above grade level in his literacy development.

Portrait of a Model Assessment System: KINDERGARTEN

OCTOBER – MAY *continued*

Conferences

Twice each year, the children's kindergarten teachers meet one-on-one with each child's family member(s) for an extended conversation about the child's progress, next steps for development, and celebrations. The teachers share writing and other work samples. The teachers also ask questions about each child's interests both in and out of school, from the perspective of the family member(s), and ask if families have any questions or concerns that they would like to share with teachers about their child's literacy development.

Celebrating Growth

By the end of the year, there is a lot to celebrate. Emma, Ayesha, and Emmanuel have each made progress in their literacy development. Their teachers end the year by filing anecdotal notes in each child's transition form so that these records are available to their first-grade teachers. This ensures that their next teachers can begin the year with a lot of information to begin meeting each child's individual learning goals and needs.

First Grade

Portrait of a Model Assessment System: FIRST GRADE

Grade 1

AUGUST (BEFORE FIRST GRADE BEGINS)

Reviewing Data: Leadership Team

In the summer, the school leadership team reviews their previous year's data and plans instructional supports for the school year according to the common profiles they see. These planned supports include continuation of their core English language arts (ELA) and literacy instruction, including research-informed differentiated instruction during Tier 1 small-group time, and availability of additional small-group instruction during What I Need time (Tier 2 intervention and enrichment time) in each of the following areas available to first-grade students: sheltered instruction (for English learners), phonemic awareness and phonics instruction, language comprehension instruction, combined phonics & language comprehension instruction, math instruction, intensive vocabulary and content knowledge building, and enrichment.

SEPTEMBER

Reviewing Data; Meeting and Learning About Children and Families: Phone Calls

During the first week of school, Ms. Jones makes phone calls to families to learn about her students. She learns that Emma enjoys having books read to her and she likes to draw pictures about the books being read to her. Her mom shared her concern that Emma continues to avoid reading books by herself and expressed that her goal for Emma this year is to have her attempt to read the words on her own.

Ms. Jones learned that Emmanuel and his parents speak mostly Haitian Creole at home and that there are children's books in both Haitian Creole and English in the home. When Emmanuel visits the neighborhood library, he chooses books about superheroes.

Ms. Jones also reviews the notes and data from her students' kindergarten binder and uses those for her initial formation of small groups for literacy instruction. For the first four weeks of first grade, Emma, Ayesha, and Emmanuel learn the classroom routines in Ms. Jones' classroom for each area of the classroom (e.g., rug, classroom library, computer stations) and each part of the schedule (e.g., whole-class instruction, and when the teacher is meeting with small groups or working in pairs).

Assessments

After routines are established during the first four weeks of school, students participate in the fall benchmark computer adaptive assessment that provides a reliable and valid screening score (identifying who is at risk of falling behind) as well as scores for word reading and language comprehension (to determine which students need which Tier 2 interventions established by the school team).

On the fall assessment, Emma's scores showed weakness in word reading (scoring at less than the 10th percentile) and strength in language

Grade 1

Portrait of a Model Assessment System: FIRST GRADE

SEPTEMBER *continued*

***Assessments** continued*

comprehension (scoring at the 70th percentile). During the English language arts (ELA) and literacy block, she receives small group differentiated instruction tailored to build on her strength in language comprehension and address her needs in word reading. She continues working with Ms. Robins, the reading specialist, during What I Need time.

Ayesha scores at the 60th percentile in word reading and the 45th percentile in language comprehension. Over time, Ms. Jones places Ayesha in small groups during Tier 1 instruction that address one or both of these areas. From an interest inventory, Ms. Jones noticed that Ayesha is among a group of children who are very interested in crafts. During What I Need time, Ayesha and several other children participate in a small group in which they read about traditional crafts from many cultures and follow instructions from procedural texts to make their own crafts, while working on decoding.

Emmanuel scores at the 85th percentile in word reading and at the 70th percentile in language comprehension. During small-group reading time in the ELA and literacy block, Ms. Jones monitors Emmanuel's mastery of the specific phonological awareness skills and letter-sound patterns that were taught, and quickly moves to more challenging components. For example, the class works on distinguishing the /ă/ in oral and written words like *mad* from the long /ā/ in *made*. Ms. Jones notes that Emmanuel has mastered this, and she provides explicit instruction to distinguish these sounds in words that integrate blends and common orthographic patterns like *cake* and *crack*. Given the speed with which Emmanuel demonstrates mastery of these patterns, Ms. Jones spends most of her time with Emmanuel working on fluency, particularly prosody, discussing important vocabulary words that he needs to know in order to comprehend the texts he is reading, and, as in all groups, engaging in higher-order text discussion. During What I Need time, Emmanuel works on an extension of the science unit that the rest of the class is working on, in which they are learning to integrate ideas from their first-hand investigations and texts focused on core science ideas from the unit, which supports his reading comprehension development.

During the ELA and literacy block small-group time (Tier 1), Ms. Jones uses what she continually learns from observation/notetaking to pair children for partner reading. For example, she pairs Emma and Ayesha, seeing that Emma can support Ayesha's weaker language comprehension while Ayesha supports Emma with her weaker word reading.

OCTOBER – JANUARY

Continued Observation

After the children return from winter break, Ms. Jones continues to observe them regularly during one-on-one, small-group, and whole-class activities. During these times, she looks for opportunities to leverage individual students' literacy strengths and support their needs in particular areas. For example, Ms. Jones looks for opportunities to build on Emma's strengths in language comprehension with increasingly challenging text and to address her needs in word reading. For Ayesha, Ms. Jones looks for opportunities to build on her strengths in word

Portrait of a Model Assessment System: FIRST GRADE

Grade 1

OCTOBER – JANUARY *continued*

Continued Observation *continued*

reading with increasingly challenging text and to address her needs in language comprehension. For Emmanuel, Ms. Jones continues to look for opportunities for him to work on oral reading fluency and comprehension with increasingly challenging text.

Ms. Jones observes and assesses the children in her class regularly and records key observations of their literacy strengths and areas of needed growth in her data binder.

Assessments

Sometimes, Ms. Jones needs to have more systematic, formal assessment information than she can get from observation and curriculum-based learning checks alone. In late January, students again take the winter computer adaptive benchmark assessment to monitor their growth since the fall. This assessment serves three purposes, each of which is important for making sure all children in the class are receiving instruction that targets their learning needs:

1. screening to determine whether students might need intervention,
2. identifying broad domains of strengths and needs for instruction, and
3. providing information about trends in individual students' and whole-class growth over time.

On the winter benchmark assessment, Emma's scores show continued weakness in word reading (scoring at the 20th percentile) and strength in language comprehension (scoring at the 75th percentile). During What I Need time, Ms. Robins continues to work with Emma to build her phonological, and especially phonemic, awareness. She notes that Emma has mastered rhyming and is able to identify the initial and last sounds but has difficulties identifying the medial sound of one-syllable words. Ms. Robins, as well as Ms. Jones, use picture card sorting activities and other techniques to give Emma practice with differentiating words with different short- and long-vowel medial sounds. Emma is eager to show her family how she does this activity at the school open house.

Ayesha scores at the 65th percentile in word reading and the 40th percentile in language comprehension. Ms. Jones places Ayesha in small groups that leverage Ayesha's and other group members' interest in animals, while targeting language comprehension. For example, Ayesha and her small group read informational texts related to their current science unit, in which they are learning how parents and offspring interact to help young animals survive.

Emmanuel's parents alert Ms. Jones that Emmanuel developed pneumonia over winter break, which results in his missing the first two weeks of school in January. He returns to school just in time to take the winter benchmark, on which his percentiles drop dramatically from the fall (to the 45th percentile in word reading and 50th percentile in language comprehension). Ms. Jones makes a note in the assessment system that Emmanuel has been out with pneumonia. Because his performance on the winter benchmark assessment is lower than anticipated, Ms. Jones closely observes Emmanuel's performance during whole-class and small-group literacy activities. Using evidence collected

Grade 1

Portrait of a Model Assessment System: FIRST GRADE

OCTOBER – JANUARY *continued*

***Assessments** continued*

during this daily use of the formative assessment process, she determines that his performance is similar to before the break and, therefore, she does not need to re-administer the winter benchmark assessment. In addition to continuing to work on prosody and engaging in higher-order discussion of ideas in text, Emmanuel also joins the small group that is focused on targeting language comprehension through reading about and discussing animals. During What I Need time, Emmanuel is sometimes paired with Emma to practice fluency, particularly prosody, and he enjoys paired reading. Ms. Jones notes that when Emmanuel reads with Emma, he is more likely to go back and correct his reading errors, which provides a good model of self-monitoring while reading for Emma.

Planning

Ms. Jones' district ensures that she has daily planning time, and also encourages some planning hours to be used as "data days," in which teachers use the information in their data binders to inform their planning of individual, small-group, and whole-class lessons. For example, Ms. Jones reviews data from observations, learning checks, interest inventories, reading and writing attitude surveys, and benchmark assessments to identify individual and class-wide trends in the data, to rearrange small groups for literacy instruction, and to make notes to consult with the reading specialist about any students who may need additional assessment to be evaluated for Tier 2 support in literacy.

Conferences

Ms. Jones' "data days" also help her prepare for conferences with her students' families, which occur twice each year. In these family-teacher conferences, Ms. Jones meets one-on-one with each child's family member(s) for an extended conversation about the child's progress, next steps for development, and celebrations. Ms. Jones also shares writing and other work samples. With all families, Ms. Jones asks many questions about each child's interests both in and out of school, from the perspective of the family member(s) and elicits any questions or concerns they would like to share with her about their child's literacy development. For example, Ms. Jones and Ms. Robins share information regarding Emma's progress on word reading, both in the classroom and during What I Need time, and they share activities Emma's family can do with her at home to provide additional practice. Emma's parents share that Emma is very excited right now about a community theater production she is practicing for and that she continues to love acting.

Portrait of a Model Assessment System: FIRST GRADE

Grade 1

FEBRUARY – MAY

Assessments

Emma, Ayesha, and Emmanuel continue to enjoy first grade.

Emma's spring benchmark scores show continued strength in language comprehension (scoring at the 70th percentile). After working with Emma for a few months, Ms. Robins (the reading specialist) is pleased to report improved number of words read correctly on progress monitoring (meeting Emma's individualized improvement goal). However, Emma's spring benchmark score in word reading is still below the school's spring benchmark cut score. These two pieces of information combined suggest that Ms. Robin's services are helping Emma and that they should be continued. Ms. Robins continues working with Emma on differentiating words with short- and long-vowel medial sounds during What I Need time. During individual and small-group instruction, Ms. Jones provides many opportunities for Emma to apply the skills she is practicing with Ms. Robins during oral text reading.

Throughout the spring, Ayesha enjoys working with her peers and reading books that connect to their science unit, in which the class is investigating and reading about animals' survival. Her scores on the spring benchmark assessment reveal a similar pattern in comparison to her winter scores: weakness in language comprehension (scoring at the 35th percentile), and strength in word reading (scoring at the 70th percentile). Ms. Jones continues to look for opportunities to provide instruction to target comprehension during individual and small-group work with Ayesha, with an emphasis on using multiple comprehension strategies, building and using background knowledge, and vocabulary. Ms. Jones also targets each of these areas in the context of whole-class, text-based discussions during interactive class read-alouds. As in other years, Ms. Jones keeps her classroom library stocked with books that reflect the interests and cultural backgrounds of students in her classroom, bringing in books from the school or public library when needed.

Emmanuel again scores highly on all components of the spring benchmark assessment. In addition to continuing to work on prosody and engaging in higher-order discussion of ideas in text, Emmanuel also joins the small group that is focused on targeting language comprehension through reading about and discussing animals' survival, connecting to the class' current science unit.

Grade 1

Portrait of a Model Assessment System: FIRST GRADE

FEBRUARY – MAY *continued*

Planning

Ms. Jones continues to use data collected in the fall and winter to meet with children in needs-based reading groups, in which all children practice skills and have opportunities to apply those skills while reading. In addition to needs-based small groups, all children have many opportunities to engage with text throughout the day. Ms. Jones reads aloud throughout the day to support children's learning about literature, science, social studies, mathematics, and social-emotional skills. The class discusses the ideas in texts and talks about the meaning of unfamiliar words. The children also read and write across the school day, both individually and with partners.

Based on the classroom-based formative data collected in class and Ms. Robins' data from her sessions with Emma, Emma's teachers recommend that she attend summer school to support continued growth in word reading. Emma's parents are supportive of this idea and get Emma excited about continuing to practice her reading during the summer and getting to see some of her friends at summer school as well.

JUNE

Celebrating Growth

Emma, Ayesha, and Emmanuel all loved first grade and are looking forward to the spring end-of-year celebration to share how much they learned with their families.

At the end-of-year celebration, children's work across content areas is displayed around the room, such as drawing and writing they have done to share their learning in science and social studies. Children also have opportunities to demonstrate to their families the skills they have been working on in small-group reading instruction—skills such as decoding and fluent reading.

Data Sharing

At the end of the year, Ms. Jones completes transition forms to share with the children's upcoming second-grade teacher. The forms include descriptive information about the child, as well as the child's spring computer adaptive benchmark assessment data and a few samples of student writing from the spring. Ms. Jones makes sure to highlight key information about each child that she thinks will be helpful to next year's teacher, such as specific skills they were working on during small group reading instruction near the end of the year and their interests. She also includes a note that the second-grade teacher should contact Emma's summer-school teacher to learn about her progress during summer school. After the end of the school year, the school holds transition meetings for teachers so that, for example, first-grade teachers can share important observations and data about their students and the second-grade teachers can ask questions about their incoming class of students.

Second Grade

Portrait of a Model Assessment System: SECOND GRADE

AUGUST (BEFORE SECOND GRADE BEGINS)

Reviewing Data; Meeting and Learning about Children and Families: Bus Tour and Open House

Mr. Ahmed begins getting to know his students by reviewing the notes and data from their first-grade transition and his notes from the transition meeting with first-grade teachers from June. Mr. Ahmed also meets many of his students and their families on the schools' summer bus tour, where teachers ride on a school bus to different stops in the community to meet children and their families and to provide backpacks with school supplies to start the year. Mr. Ahmed meets Ayesha, Emmanuel, and their families on the bus tour. He also meets Emma, who came with a friend because her parents were working during the tour.

Mr. Ahmed calls Emma's family after the bus tour to make sure they know about and are able to attend the upcoming open house at school. On the phone with Emma's parents, Mr. Ahmed learns that Emma is looking forward to second grade. He also learns that in addition to Emma attending summer school, she and her family completed activities over the summer that were shared by Ms. Jones and Ms. Robins to help Emma practice and build confidence about reading. Looking over Emma's summer-school data, Mr. Ahmed can see evidence that Emma does experience a boost in word reading during this time.

The district continues to ensure that Mr. Ahmed has daily planning time, and also encourages some planning hours to be used as "data days," in which teachers use the information in their data binders to inform their planning of individual, small-group, and whole-class lessons.

Emma's, Ayesha's, and Emmanuel's families attend an open house the week before school to meet Mr. Ahmed and to see their new classroom. Mr. Ahmed shows families and children different areas of the classroom, such as the rug where the class will gather for read-alouds. He shows them the classroom library, which Mr. Ahmed has filled with a large variety of narrative and informational texts that reflect the backgrounds of the school's students and focus on many different topics. In addition to texts on the classroom library shelves, Mr. Ahmed also has a variety of texts on display that are connected to the first social studies and science units of the year.

Mr. Ahmed takes some notes about what he learned about each family and child in a data binder he has created using his class list. The binder has a section for each child, as well as a section with many tables containing rows labeled for each child and specific standards (or components) to be observed heading each column. There are also blank pages for notetaking, to which he will continue adding throughout the year.

2 Grade

Portrait of a Model Assessment System: SECOND GRADE

SEPTEMBER – DECEMBER

Initial Observations in a Classroom Setting

Emma, Ayesha, and Emmanuel look forward to their first day of second grade. Mr. Ahmed does not administer any formal assessment in the first weeks of school; however, he spends time at the beginning of the year getting to know the children as readers and writers, closely observing the children throughout the day as they participate in reading, writing, speaking, and listening activities. For example, Mr. Ahmed pays close attention to children's contributions during interactive read-alouds and to their speaking, drawing, and writing as they share about their summers and what they are excited to learn about in second grade. Mr. Ahmed uses notes and data from students' first-grade teachers for his initial formation of small groups for literacy instruction.

Assessments

Near the beginning of the year, Mr. Ahmed administers a home- and school-interest inventory to learn more about each child's interests. Through the inventory, he learns about Emma's interests in art, music, and acting. He learns that Ayesha not only is very interested in animals and wants to become a vet when she grows up, but she also loves superheroes and making crafts. He learns more about Emmanuel's interest in science, especially reading and learning about animals, such as insects. Mr. Ahmed pays close attention to the children's interests so that he can create small groups, select read-alouds, and help children select books for individual reading and writing topics based on their interests and experiences.

During the first month of school, Mr. Ahmed teaches and reinforces classroom routines and procedures. After about a month of school, students participate in the fall computer adaptive benchmark assessment, which screens students to determine who might need Tier 2 instruction, identifies broad domains of strengths and needs for literacy instruction, and provides information about trends in scores over time. Mr. Ahmed is already familiar with patterns in students' first-grade scores. He finds that Emma's, Ayesha's, and Emmanuel's second-grade fall benchmark assessment scores are similar to their spring scores from first grade, although Ayesha's and Emmanuel's scores dropped slightly. He is pleased to see that Emma's word reading score increased from the spring (from 10th percentile to just below the 25th percentile), which he shares with Ms. Robins and Emma's parents. Mr. Ahmed is not concerned about the slight drop in Ayesha's and Emmanuel's scores at this time because he knows that it is not uncommon to see dips in scores on the fall assessment. He continues to closely monitor trends in all students' literacy progress through daily formative assessment.

Emma continues to work with Ms. Robins during What I Need time (a block in which all children are engaged in intervention and/or enrichment). Ms. Robins determines that Emma has mastered differentiating words with short- and long-vowel medial sounds, which they were working on at the end of first grade. As Emma continues to improve in decoding, Ms. Robins begins to work more with Emma on oral reading fluency, including reading

Portrait of a Model Assessment System: SECOND GRADE

2 Grade

SEPTEMBER – DECEMBER *continued*

***Assessments** continued*

rate, accuracy, and prosody. Ms. Robins and Mr. Ahmed meet regularly to discuss Emma's progress. During individual and small-group instruction, Mr. Ahmed provides many opportunities for Emma to apply the decoding and oral reading fluency skills she is practicing during oral text reading, and he offers feedback. Because Mr. Ahmed knows that Emma loves acting in plays, he places her in a small group, with other students who are working on reading fluency, to practice and perform readers' theater for the class.

Several times a year, Mr. Ahmed administers vocabulary assessments based on words taught in the district. These assessments also focus on using strategies for determining the meaning of unknown words, such as using context clues in a sentence and morphological analysis (i.e., using roots, prefixes, and suffixes as clues to the meaning of unknown words). After a few cycles of vocabulary instruction and assessment, Mr. Ahmed notices some patterns in students' performance. For example, although Emma continues to work on decoding with Ms. Robins, Mr. Ahmed learns that she has a vast knowledge of vocabulary, which she loves to share with the class during interactive read-alouds, text-based discussions, and content area learning. He notices that while Ayesha can decode and fluently read most words with ease, both oral and written vocabulary knowledge is a weakness for her. Mr. Ahmed adds notes about these trends in his data binder and plans for individual and small-group vocabulary-focused instruction for Ayesha. Emmanuel, in contrast, has very strong meta-linguistic awareness, which Mr. Ahmed knows is often the case in children who are bilingual. When teaching morphological analysis, Mr. Ahmed uses Emmanuel's strength in this area as a resource during class discussions.

JANUARY – MAY

Assessments

Students return from winter break energized and ready to begin new units of instruction across content areas. Mr. Ahmed revisits and reinforces classroom routines and procedures, and he has consulted his data binder over break to rearrange small groups to target students' instructional needs, based on classroom-based observation and assessment before break.

In late January, students again take the winter computer adaptive benchmark assessment to monitor their growth since the fall. This assessment serves three purposes, each of which is important for making sure all children in the class are receiving instruction that targets their learning needs:

1. screening to determine whether students might need intervention,
2. identifying broad domains of strengths and needs for instruction, and
3. providing information about trends in individual students' and whole-class growth over time.

2 Grade

Portrait of a Model Assessment System: SECOND GRADE

JANUARY – MAY *continued*

Planning

Emma's scores on the winter benchmark assessment continue the upward trend that Mr. Ahmed noticed in the fall. Language comprehension continues to be a primary strength for Emma (scoring at the 75th percentile in language comprehension); her word reading score also increased (scoring at the 50th percentile), in part supported by her vast vocabulary knowledge. This score confirms the patterns recorded in Mr. Ahmed's data binder based on classroom formative assessment data collected during small group reading instruction with Emma as well as data collected by Ms. Robins during her work with Emma during What I Need time. Mr. Ahmed looks forward to sharing this information with Emma's parents at conferences in February.

Despite the small-group and one-on-one instruction that Mr. Ahmed designed to target Ayesha's challenges with reading comprehension throughout the fall, Ayesha's reading comprehension scores on the winter benchmark placed her at the 20th percentile for reading comprehension. Noticing this trend in Ayesha's data across first grade and the first two benchmark assessment administrations of second grade, Mr. Ahmed refers Ayesha to the reading specialist, Ms. Robins. Mr. Ahmed and Ms. Robins meet to discuss his observations and the classroom-assessment data he has collected since the fall that are consistent with Ayesha's lower reading comprehension scores on the benchmark assessment.

For example, Mr. Ahmed shares that, despite Ayesha's strong word reading and spelling skills and her enjoyment of reading aloud with partners, Ayesha has difficulty recalling key details of narrative and informational texts during retellings, applying reading strategies (e.g., inferring, visualizing) without a lot of teacher support, and determining the meaning of unknown words in text. Based on this information, Ms. Robins administers additional assessment to identify Ayesha's specific areas of weakness and instructional needs. Ms. Robins' findings confirm what Mr. Ahmed has observed in class. While Ayesha reads aloud fluently and easily decodes unfamiliar words, she reads passively, engages in little inferring, and has difficulty processing phonological and semantic (i.e., meaning) aspects of text simultaneously. Ayesha's assessment results indicate that she needs Tier 2 intervention to support her comprehension development; Ayesha begins working with Ms. Robins during What I Need time on constructing meaning with text and coordinating multiple ideas while reading. For example, when working with Ayesha, Ms. Robins provides explicit instruction in scaffolded imagery, creating story maps, connecting her background knowledge and experiences to text, inference building, and using multiple comprehension strategies while reading.

Emmanuel's scores on the winter benchmark assessment are back up from the slight dip in his fall scores. On the winter assessment, he scores at the 85th percentile in word reading and the 80th percentile in reading comprehension. While Emmanuel is reading above grade-level text, Mr. Ahmed notices that, as text complexity increases, Emmanuel needs continued practice in reading fluency, particularly prosody. To work on this, Mr. Ahmed sometimes pairs Emmanuel with Emma for partner and echo reading because Emma's reading comprehension scores are also above grade level. In addition, Emma continues to benefit from hearing models of fluent reading of grade-level text. Emmanuel

Portrait of a Model Assessment System: SECOND GRADE

2 Grade

JANUARY – MAY *continued*

***Planning** continued*

and the other students in the class also have many opportunities to select and engage in independent and partner reading of texts about topics and in genres that interest them, and in connection to their content area instruction. For example, in their current science unit, Mr. Ahmed's class is gathering information using first-hand observations, maps, photographs, and texts to learn about where water is found in Michigan. Students synthesize information from multiple sources to develop models that represent the land and bodies of water in their community and around the state. As an extension, the students are researching the Great Lakes using print and digital texts in small groups—working on vocabulary knowledge, fluency, and comprehension in the process. Mr. Ahmed helps Emmanuel identify related texts that he is able to learn from, and he challenges Emmanuel with extensions that support continued disciplinary knowledge building and applying reading comprehension skills with challenging texts.

MAY – JUNE

Continued Observation

Emma, Ayesha, and **Emmanuel** continue to enjoy second grade. Based on Emma's good progress in word reading, she works with Ms. Robins less frequently, although Mr. Ahmed and Ms. Robins continue to regularly touch base about Emma's performance on classroom-based formative assessment. Ayesha enjoys the one-on-one time that she spends with Ms. Robins working on constructing meaning and coordinating multiple ideas while reading, and her attitude toward both recreational and academic reading is becoming more positive. Mr. Ahmed notices that Ayesha is beginning to contribute more of her ideas during text-based discussions and interactive read-alouds in class, especially when he gives time for students to turn-and-talk about questions before sharing out with the class. However, she continues to struggle with inferring, including key details when retelling grade-level text, and applying comprehension strategies during independent reading. Emmanuel continues to thrive across areas of literacy development. Mr. Ahmed continues to look out for ways to keep Emmanuel engaged by helping him identify texts that interest him and assigning challenging tasks that call for higher-order comprehension and application.

Assessments and Planning

Mr. Ahmed frequently engages in formative assessment of student learning after introducing particular topics or skills to identify how students are progressing, which students need additional instruction in particular areas, and next steps for whole-class and small-group instruction. For example, during one ELA unit, in which students learned about different text features and how to use them to support their comprehension of informational text, he assessed students' understanding and use of the features multiple times throughout the unit. On one of

2 Grade

Portrait of a Model Assessment System: SECOND GRADE

MAY – JUNE *continued*

Assessments and Planning *continued*

these learning checks, Mr. Ahmed found that Emmanuel doesn't understand some specific informational text features (e.g., sidebars, index, labeled diagrams). Mr. Ahmed predicts that this might be due to Emmanuel missing nearly a week of school because he is home with the flu. To provide additional instruction in this area, Mr. Ahmed puts Emmanuel in a small group to continue working on this with three other students who similarly showed gaps in understanding of informational text features on the learning check. During these small-group sessions, Mr. Ahmed engages the students in "text feature walks," in which students revisit texts they have read before, then read and discuss how the information in each text feature relates to the main idea of the text. Mr. Ahmed places Ayesha in this small group to provide her additional practice using text features to support her comprehension of grade-level text.

Emma's scores on the spring benchmark assessment show continued growth in word reading and consistent strength in reading comprehension, again supported by her vast vocabulary knowledge. Due to her growth throughout the year, Emma no longer needs Tier 2 support in reading.

Ayesha's scores on the spring benchmark assessment continue to show strength in word reading and some improvement in reading comprehension; however, she continues to work regularly with Ms. Robins to strengthen both listening and reading comprehension, and Ms. Robins and Mr. Ahmed begin to plan for Ayesha to receive continued support in third grade.

Emmanuel's scores on the spring benchmark assessment show continued strength across areas of literacy. This is consistent with his performance in the classroom and supported by the time he spends reading recreationally outside of school.

Data Sharing

As done by teachers in previous grades, Mr. Ahmed completes a transition form to share with the children's upcoming third-grade teacher. The document includes descriptive information about the children as well as the spring computer adaptive benchmark assessment data and a few samples of student writing from the spring. Mr. Ahmed highlights key information about each child that he thinks will be helpful to next year's teacher, such as specific skills they were working on during small group reading instruction near the end of the year. As in previous years, the school holds transition meetings for teachers so that, for example, second-grade teachers can share important observations and data about their students and third-grade teachers can ask questions about their incoming class of students. This process provides valuable information that allows third-grade teachers to use data to inform their instruction beginning at the start of the new school year.

Third Grade Challenge

3 Grade

The **Portrait** for the students' third-grade year is left intentionally blank to allow readers to apply the insights they might have gathered by reading through the **Portraits** for Pre-K through grade 2.

The **Portraits** illustrate ways that children's literacy knowledge and skills can vary, even when they are the same age. Furthermore, they illustrate that children struggle with literacy learning for different reasons in the early grades. Sometimes these struggles will be apparent early (as we saw with Emma); others emerge over time (as with Ayesha). Other students may struggle very little; however, even consistently high-performing students (as we saw with Emmanuel) deserve instructional attention and continued support of literacy development across grades.

With the robust, multi-faceted early literacy assessment system outlined in the **Portraits**, Emma, Ayesha, and Emmanuel move into their (higher stakes) third-grade year having benefited from a strategic ELAS, which guided teachers and other service providers' design and implementation of a variety of instructional supports targeting the students' individual literacy learning needs during their first years of schooling.

The features of a coherent ELAS are reflected throughout the preK-2 **Portraits**. The **Portraits** illustrate the various ways in which the children's classroom teachers and other service providers (e.g., speech and language pathologist, reading specialist):

- engage in developmentally sensitive assessment,
- use information from assessment tools and formative assessment practices to document children's growth,
- reflect upon how they will continue to improve their curriculum and instruction based on data, and
- use data to identify students who may have risk factors so that these children received effective literacy intervention programs as early as possible.

Guidelines for drafting the grade 3 Portrait

As you work alone or with others to draft a possible Portrait of an ELAS that the three students might experience during their third-grade year, pay attention to several themes that are embedded in the Portraits and can guide your thinking:

- Teachers engaged in strategic learning about their students' communities, families, and individual interests, especially at the beginning of each school year. The first illustration of this is the pre-kindergarten picnic where the pre-kindergarten teacher met her students and their families. ***How might the students' third-grade teachers collect and use information about students' communities, families, and individual interests?***
- Teachers and other service providers (e.g., speech and language pathologist, reading specialist) collected and analyzed data at multiple points throughout the school year to make instructional decisions. ***What types of assessment data should the students' third-grade teachers and other service providers collect? When, and how frequently?***
- Some assessments were administered to all students, while other assessments were tailored to answering questions about a specific student's literacy development and learning needs. ***What types of assessment will help the students' third-grade teacher learn about all students' literacy development, and help identify students who might need to participate in more targeted assessment based on specific questions about their development?***
- Teachers used assessment data to design individualized and small-group instruction. ***How would you expect to see the students' third-grade teachers using assessment data to design individualized and small-group instruction?***
- Where indicated by data, the classroom teacher sought the expertise of specialists to conduct further assessment and to develop and implement targeted interventions. ***Based on what you already know about Emma, Ayesha, and Emmanuel, what service providers, if any, might still need to play a role in third grade? What additional data might they need to collect and why?***
- Teachers, across grade levels, regularly engaged in sharing data and celebrating student learning with families via phone calls and conferences. ***How would you expect the third-grade teachers to continue the tradition of data sharing that was reflected in the preK-2 Portraits?***
- In addition to sharing data with families, teachers shared data with one another, both within the school year (e.g., reading specialist, paraprofessionals, and other teachers during "data days"), and across school years, by sharing data binders and other important information with their students' new teachers for the following year. ***What district and school-level systems would need to be in place to support the students' third-grade teachers to engage in productive conversations and collaborative instructional planning, using the literacy assessment data they collect throughout the year?***

This organizer can guide your conversations and thinking around the 3rd grade cycle. Fill-in forms are available for your team at www.MichiganAssessmentConsortium.org/ELAS.

Portrait of a Model Assessment System: THIRD GRADE

3 Grade

AUGUST (BEFORE THIRD GRADE BEGINS)

Reviewing Data

INSERT YOUR IDEAS HERE

Meeting and Learning About Children and Families

INSERT YOUR IDEAS HERE

SEPTEMBER – DECEMBER

Initial Observations in a Classroom Setting

INSERT YOUR IDEAS HERE

Assessments

INSERT YOUR IDEAS HERE

Planning

INSERT YOUR IDEAS HERE

3 Grade

Portrait of a Model Assessment System: THIRD GRADE

JANUARY – MAY

Continued Observation

INSERT YOUR IDEAS HERE

Planning

INSERT YOUR IDEAS HERE

Assessments

INSERT YOUR IDEAS HERE

Conferences

INSERT YOUR IDEAS HERE

MAY – JUNE

Celebrating Growth

INSERT YOUR IDEAS HERE

Data Sharing

INSERT YOUR IDEAS HERE

"The leadership team is composed of instructional leaders committed to continuous improvements in literacy and ongoing attention to data."

SECTION III — RESEARCH AND SUPPORTING SCIENCE

Section III contains five chapters, each of which provides relevant research and supporting science related to one of the five major Organizing and Design Principles described in **Section I** and exemplified by aspects of the **Portraits** in **Section II.** Each chapter elaborates on key details and information that provide the background and justification for the related Principle and associated Recommendations provided in **Section I.** Finally, relevant resources and tools are offered that can support pursuit of the Recommendations in each Phase.

As noted in Section I, the Principles and associated Recommendations fall into three implementation Phases, as shown below.

Section III Organization

Phase I: Planning for and Designing an Early Literacy Assessment System

Section III-1 — Necessary Conditions and Structures: District characteristics that support coherent implementation of an early literacy assessment system

Principle #1: The ELAS must be designed to ALIGN AND INTEGRATE WITH ALL SCHOOL- AND DISTRICT-LEVEL SYSTEMS; this includes the systems of curriculum, instruction, and professional learning as well as the overall assessment system.

Section III-2 — Assessment System Architecture: Design features needed in the structure and operation of an early literacy assessment system

Principle #2: The ELAS must reflect ASSESSMENT SYSTEM DESIGN FEATURES that make it coherent, comprehensive, and continuous across time and contexts of use.

Phase II: Implementing an Early Literacy Assessment System

Section III-3 — Literacy Development and Learning: Features of an early literacy assessment system that reflect what we know

Principle #3: The ELAS must reflect what we know from theory, research, and practice about LITERACY DEVELOPMENT.

Section III-4 — Purposes, Users, and Technical Adequacy of Assessments: Features of early literacy assessment that reflect what we know

Principle #4: The ELAS must reflect what we know about the PURPOSES, USERS, AND TECHNICAL ADEQUACY OF EARLY LITERACY ASSESSMENT.

Phase III: Supporting and Monitoring an Early Literacy Assessment System

Section III-5 — Professional Learning Programs: Features that support stakeholder groups in implementing and using an ELAS

Principle #5: The ELAS must be supported and monitored by a sustained program of collaborative, inquiry-based PROFESSIONAL LEARNING and FEEDBACK.

"District and school settings are complex ecologies that call for necessary conditions and structures that can support coherence among curriculum, instruction, and assessment systems."

Section III-1

NECESSARY CONDITIONS AND STRUCTURES: District characteristics that support coherent implementation of an early literacy assessment system

This chapter describes the state- and district-level features that need to be in place in order to support an early literacy assessment system (ELAS) that fits within a coherent system of curriculum, instruction, assessment, and professional learning in support of early literacy development. The content provides some relevant explanation and backing for ***Principle #1*** *and associated* ***Phase I Planning and Design Recommendations.***

Phase I RECOMMENDATIONS (Principle #1)

Principle #1: The ELAS must be designed to ALIGN AND INTEGRATE WITH ALL SCHOOL- AND DISTRICT-LEVEL SYSTEMS; this includes the systems of curriculum, instruction, and professional learning as well as the overall assessment system.

1.1: DISTRICT LEADERS should form an ELAS Leadership Team charged with guiding the Planning and Design, Implementation, and Supporting and Monitoring Phases of the ELAS.

The **ELAS Leadership Team** should:

1.2: Establish compatibility and coordination of the ELAS with other district- and state-level systems of curriculum, instruction, assessment, professional learning, and accountability.

1.3: Plan thoughtful strategies for engaging with families and the community as key participants in the ELAS process, both as contributors to and recipients of assessment data.

Introduction

District and school settings are complex ecologies that call for necessary conditions and structures that can support coherence among curriculum, instruction, and assessment systems. Establishing such coherence at the "local" level of classrooms within a school is critical. This requires that a district have in place policies, procedures, and practices that enable the acquisition and use of an appropriate set of resources together with professional development programs that enable what is supposed to happen at the school and classroom level.

This section will begin to consider traits of high-performing school districts, in general, and then describe the specific implications and recommendations for school-level systems and the necessary conditions and structures that support coherent curriculum, instruction, and assessment systems.

Coherence is crucial

We can define coherence as a process that involves schools and district central offices working together to craft or continually negotiate the fit between external demands and schools' own goals and strategies (Honig & Hatch, 2004). Crafting coherence involves schools setting school-wide goals and strategies that have particular features, using those goals and strategies to decide whether to bridge themselves to or buffer themselves from external demands. Coherence also depends upon district central offices supporting these school-level processes.

Pellegrino et al., (2001), in an effort to prompt new thinking about instruction, curriculum, and assessment design, situates this idea about coherence within a balanced assessment system where different assessments serve different purposes and different users. The authors explain that this balanced design can ensure features of coherence, comprehensiveness, and continuity. A system of assessment can provide a variety of evidence to support educational decision making and thus is considered to be comprehensive. The evidence and data across a system would connect back to student learning and growth over time, providing coherence and continuity. To build an ELAS without noting the above conditions and considerations will lead to critical missteps in future efforts.

Start with leadership and a theory of action

The creation and maintenance of an early literacy assessment system (ELAS), a part of a broader pre-K through secondary assessment system, will be more effective if the charge is taken up by the district's administrators and policymakers. Districts *"are uniquely positioned to ensure equity and to increase the capacity of all schools—not just some"* (Childress, Etter, Platas, Wheeler, & Campbell, 2007, p. 1). Looking at districts as the unit of analysis helps us frame the organizational conditions that need to be in place to foster a coherent, comprehensive, and continuous set of processes. We acknowledge that as organizations grow in size, they also grow in complexity.

A system of assessment must align with and be integrated with other systems that operate at school and district levels including curriculum, instruction, professional development, and accountability. As a result, an ELAS must be monitored by a district or school leadership team to ensure that it is aligned horizontally within grade levels and vertically across grade levels throughout a district. The leadership team also ensures that the ELAS provides data to inform instructional and curricular decisions.

One function of the ELAS Leadership Team is to articulate the district's ELAS theory of action. Developing and adopting a theory of action for the structure and functioning of the proposed ELAS can be a powerful practice. A theory of action consists of five components:

1. Problem identification
2. The goals to be achieved
3. An understanding of root cause
4. An understanding of the change process
5. An understanding of the organizational context (Mintrop, 2016).

Theories of action are a worthy vehicle for generating, testing, and confirming actionable knowledge. Additional information about the importance of a theory of action and the development of a logic model to clarify that theory and design a system of assessment is provided in Section III-2.

It is critical to have a process in place that uses data to inform decisions by the stakeholders. Creating structures of data collection and analysis at regular intervals throughout the year to adjust literacy instruction and intervention across the school and district is highly recommended. Teams can commit to and use a problem-solving approach with a set of questions to drive data dialogues.

Characteristics of high-performing districts and schools

Researchers Leithwood and Azah (2016) identify common characteristics of high-performing school districts, most of which support our Phase I Recommendations and the suggestions described in this section. In the districts they studied that had a positive impact on student outcomes, there was a commitment to the deliberate and consistent use of multiple sources of evidence to inform decisions, including decisions to maintain a coherent instructional program. Leadership was shared across the organization and not defined by title or role. Professional learning was driven by an authentic, job-embedded, relevant approach. Additionally, these districts had productive relationships with families. This research suggests that it is the district that guides individual schools in creating systems conducive to an effective ELAS.

Schools reflect their district and function as formal organizations themselves. The research of Bryk and colleagues (2010) unpacks the school improvement efforts within the Chicago Public Schools and posits that district or school leadership is the driver for change. More specifically, it is the principal who is the catalyst for school-level improvement efforts and initiatives, but the principal also nurtures the leadership of others to sustain a coherent program of school-wide development. These efforts include encouraging new relationships with parents and families, enhancing professional capacities of staff, and cultivating supports concerning curriculum, instruction, and assessment. It is coherence in programming and effort that is key to consider.

Literacy Essentials provide guidance

Michigan educators are fortunate to have the Essential School-Wide and Center-Wide Practices in Literacy (MAISA/GELN/ELTF, 2016) to guide implications and recommendations for the field. The Essentials are grounded in research and informed by practitioners from across Michigan. Concepts described in the Essentials are cited below, drawn from a select subset of the School-Wide and Center-Wide Practices relevant to Principle #1. Although all ten School-Wide and Center-Wide Practices should occur in schools and be supported by districts, we know they will have greater impact when the effort is distributed across a group. We therefore suggest beginning the ELAS planning and development with Recommendation 1.1 of this Guide—the establishment of an ELAS Leadership Team—and focusing specifically on the *Essential School-Wide Center-Wide Practices* (MAISA/GELN/ELTF, 2016) that influence assessment. Because this is systems-level work throughout an organization, we acknowledge the extended amount of time it will take to implement the Recommendations and suggested practices.

"The leadership team is composed of instructional leaders committed to continuous improvements in literacy and ongoing attention to data."

School-Wide and Center-Wide Practice in Literacy 1

This Practice in Literacy calls for the implementation of evidence-based, high-quality literacy curriculum, instruction, and assessment aligned across the learning environment (Slavin, Cheung, Holmes, Madden, & Chamberlain, 2013). Additionally, the ELAS Leadership Team must maintain a comprehensive system for assessing children's strengths and needs and using that information to inform children's education (Taylor, Pearson, Clark, & Walpole, 2000). This not only includes a set of assessment tools and practices, but also includes processes to gather and analyze the data and evidence (see Tools/Resources for Phase II). The **Portraits** in Section II of this Guide illustrate a system in which assessments are aligned with each other at a conceptual level in terms of the focus of each assessment and the ways in which information derived from assessments must align with curriculum and instruction if it is to support the development of literacy.

The **Portraits** reference a series of meetings, or "data days," that prompt teachers to review data binders to inform decisions about instruction and intervention. The use of the data binders and the scheduled meetings are coordinated by the leadership team and are practices that occur throughout the school and district. Additionally, each school leadership team reviews the previous year's data using the transition forms mentioned and plans instructional supports accordingly for the upcoming year.

Additionally, a school district must use evidence from the ELAS to develop the professional learning (PL) plan to meet the learning needs of children and instructional needs of teachers. Creating a district and school PL plan that is cohesive and based on evidence of need as well as research of effective literacy instruction will support the ongoing growth of teachers' abilities to implement an ELAS effectively.

"Ongoing professional learning opportunities reflect research on adult learning and effective literacy instruction."

School-Wide and Center-Wide Practice in Literacy 4

This Practice in Literacy states that ongoing professional learning (PL) opportunities should reflect research in adult learning and effective literacy instruction. Professional learning should be data-informed to meet the needs and best interests of teaching staff and their students (Hayes & Robnolt, 2006) as well as driven by a belief that teacher expertise is a strong predictor of child success (Podhajski, Mather, Nathan, & Sammons, 2009). Successful professional learning requires districts to invest in the development of expertise of all staff through collaborative learning designs such as study groups, collaborative inquiry, and problem solving (Cunningham, Etter, Platas, Wheeler, & Campbell, 2014). The professional learning should be focused on research-based instructional practices that are developmentally, culturally, and age-appropriate and support children's literacy development. Using resources such as the Essential Instructional Practices in Early Literacy: Prekindergarten and Essential Instructional Practices In Literacy: Grades K to 3 (MAISA/GELN/ELTF, 2016) will deepen teachers' understanding of knowledge and skills to be learned (Lane, Prokop, Johnson, Podhajski, & Nathan, 2013). Section III-5 expounds upon this recommendation further.

Professional learning for the teachers and staff is foundational in the **Portraits.** The district has established common collaborative planning time where some of the time is spent using a data dialogue protocol. Teachers and staff use evidence of students' strengths and needs noted in the data binders to inform their planning of whole-group, small-group, and individual lessons.

School-Wide and Center-Wide Practice in Literacy 5

"There is a system for determining the allocation of literacy support in addition to high-quality classroom instruction with multiple layers of support available to children who are not reading and/or writing at a proficient level."

This Practice in Literacy indicates that a district must develop a system of literacy support that includes, but also extends beyond, the instruction provided in the classroom. This system should include an equitable distribution of resources using evidence from an ELAS. Therefore, at the district and school level, there needs to be a process for determining the allocation of literacy support in addition to high-quality classroom instruction with multiple layers of support available to children who are not reading and/or writing at a proficient level. The instruction and additional supports are layered across learning environments, including the home; they are coherent and consistent with instruction received elsewhere in the school day and occur in addition to, not instead of, regular literacy instruction (Torgesen et al., 2001). This additional instruction is also differentiated to the individual child's specific profile of literacy strengths and needs (Gersten et al., 2008).

To make data-informed decisions, teachers are supported in using and reflecting on analyses of multiple, systematic internal assessments (e.g., universal screening, diagnostic, progress monitoring tools), formative assessment information collected and acted on during instruction, and observation as appropriate on an on-going basis. This practice will help to identify individual child needs early and accurately; tailor whole-group, small-group, and one-on-one instruction; and measure progress regularly (Taylor, Pearson, Clark, & Walpole, 1999). An example of this is providing intensive, systematic instruction on foundational reading skills in small groups to students who score below the benchmark score on word reading.

The **Portraits** in this Guide illustrate numerous examples of a system of support for students. During meetings to explore the data binders, students' strengths and areas of concern are discussed. Needs-based reading groups are determined, and district guidelines for Tier 2 referral are followed. Extensions for learning are represented as well. When needed, teachers gather more systematic information to add to their observations.

School-Wide and Center-Wide Practice in Literacy 8

"A consistent family engagement strategy includes specific attention to literacy development."

This Practice in Literacy encourages schools and districts to see families as valuable partners who can contribute a wealth of knowledge about individual students' assets as well as needs. These funds of knowledge will help teachers tailor instruction to capitalize on the interests and prior knowledge of students. A consistent family engagement strategy pays specific attention to literacy development. To inform instruction, school and district staff should engage with families to prioritize *learning about them and their language and literacy practices, and draw from families' daily routines to build on culturally developed knowledge and skills accumulated in the home (e.g., inviting families to share texts they read and write as part of their lives at home or at work)* (Moll, Amanti, Neff, & Gonzalez, 1992).

Learning communities comprising parents and teachers could provide regular opportunities for families to build a network of social relationships to support language and literacy development. One example would be connecting families with community organizations that provide access to books or other educational

supports (Ren & Hu, 2013). Teachers and specialists can work collaboratively to plan various levels of instructional supports, assess the efficacy of those supports, and adjust accordingly and foster familial and community participation in the education of children and the work of the learning environment (Warren, 2005).

Engagement with families plays a significant role in the early literacy assessment system illustrated in the **Portraits.** From the very beginning of the students' educational journey, the teachers are drawing information from their intentional interactions with families and archiving what they gather in the data binders. Coordinated picnics, home visits, phone calls, and regular family-teacher conferences, provide teachers opportunities to understand what the children know, enjoy, and can do. There is a deliberate focus on areas of interest, family activities, and children's progress.

Tools/Resources for PHASE I, Principle #1

Assisting Students Struggling with Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades (What Works Clearinghouse, 2009)

This guide offers five specific recommendations to help educators identify struggling readers and implement evidence-based strategies to promote their reading achievement.

Available at https://ies.ed.gov/ncee/wwc/PracticeGuide/3)

Design principles for new systems of assessment (Phi Delta Kappan, 2017)

The Every Student Succeeds Act (ESSA) grants states new flexibility to create more balanced assessment systems with a greater role for formative assessment. Drawing on lessons learned over three decades of research and reform, the authors of this article argue for state and local leaders to take the lead in designing new assessments guided by two core principles: 1) make assessments coherent with rich curriculum and instruction; 2) ground this integration of curriculum, instruction, and embedded assessments in equity-focused research on learning.

Available at https://journals.sagepub.com/doi/abs/10.1177/0031721717696478 (minimal fee required for non-PDK members).

District Assessment System Design (DASD) Toolkit (Center for Assessment, 2018)

This toolkit is useful for districts to determine users of assessment, the different ways that assessment information can be used, and which assessment approaches are most valuable in meeting the assessment information needs of different assessment users in the district.

Available at www.nciea.org/featured-resources.

Dual-Capacity Framework (DualCapacity.org)

Based on existing research and best practices, the Dual Capacity-Building Framework for Family-School Partnerships (Version 2) is designed to support the development of family engagement strategies, policies, and programs. The Framework should be seen as a compass, laying out the goals and conditions necessary to chart a path toward effective family engagement efforts that are linked to student achievement and school improvement.

Available at www.dualcapacity.org.

Michigan's Student Individual Reading Instruction Plan (IRIP) Companion Document (MEMSPA, 2017)

This 22-page document for school leaders and leadership teams is to support the use of Michigan's IRIP form. It provides general guidance, research, and best practices to school districts. The document is student focused, and its authors aim to support teachers' and teams' abilities to be data-informed as they undertake the process of creating, completing, monitoring, and supporting the implementation of an IRIP.

Available from the Michigan Elementary and Middle School Principals Association (memspa.org) or at the ELAS Tools and Resources link below.

A listing of all Tools and Resources mentioned in this Guide to help you develop an early literacy assessment system (ELAS) is available online at **www.MichiganAssessmentConsortium.org/ELAS.**

Notes

SECTION III-2

ASSESSMENT SYSTEM ARCHITECTURE: Design features needed in the structure and operation of an early literacy assessment system

This chapter considers what it means to have a balanced, well-functioning assessment system in terms of (a) fundamentals of literacy assessment, (b) system architecture and design principles, and (c) steps that need to be taken to actually plan for and design such a system. The content provides some of the relevant explanation and backing for ***Principle #2*** *and associated* ***Phase I Planning and Design Recommendations.***

Phase I RECOMMENDATIONS (Principle # 2)
Principle #2: The ELAS must reflect ASSESSMENT SYSTEM DESIGN FEATURES that make it coherent, comprehensive, and continuous across time and contexts of use.
The **ELAS LEADERSHIP TEAM** should:
1.4: Develop and adopt a logic model and theory of action for the structure, functioning, and evaluation of the proposed ELAS.
1.5: Identify the educational decisions to be made, assessment information needed to support those decisions, and the stakeholder(s) who will be making the decision(s).
1.6: Construct a framework for the ELAS that includes clearly articulated relationships among the assessment tools and practices relative to a model of competency development in reading, writing, speaking, or listening.
1.7: Use the framework to conduct an audit of all existing district- and school-level assessment tools and practices currently in use to determine whether they meet criteria for inclusion and should remain a part of the system.

Introduction

The seminal publication *Knowing What Students Know: The Science and Design of Educational Assessment* (Pellegrino, Chudowsky & Glaser, 2001) crystalized the call for balanced systems of assessment:

> Assessments at all levels—from classroom to state—will work together in a system that is comprehensive, coherent, and continuous. In such a system, assessments would provide a variety of evidence to support educational decision making. Assessment at all levels would be linked back to the same underlying model of student learning and would provide indications of student growth over time (Pellegrino et al., 2001, p. 9).

Many authors since have helped advance this conceptualization of assessment systems, as well as an understanding of what constitutes a well-functioning system (e.g., Chattergoon & Marion, 2016; Conley, 2014; Council of Chief State School

Officers [CCSSO], 2015; Darling-Hammond et al., 2013; Pellegrino et al., 2014). While much has been learned about designing and implementing high-quality assessment systems over the past 20 years, there are few examples of well-functioning systems, particularly systems incorporating state summative tests and assessments at other levels of the system (e.g., district, classroom). Despite recent efforts to articulate principles of assessment systems (Deeper Learning 4 All, 2018), creating a balanced assessment system remains challenging and finding high-quality examples in practice is very rare (see e.g., Conley, 2018).

In planning for and designing an early literacy assessment systems (ELAS) for students, it will be important for a district's ELAS Leadership Team to leverage what has been learned about three things:

1. the nature of assessment
2. the assessment of literacy
3. the principles of assessment system architecture

This body of knowledge should inform an agenda for thoughtful design of an ELAS that can enhance equitable learning and life opportunities for all students. In this section we first review key conceptual issues regarding the nature of assessment, since these issues are foundational for understanding the broader principles for system design and implementation. We conclude the chapter with a discussion of the need for development of a theory of action for the assessment system and the use of a logic model to help uncover that theory of action and guide the process of system design, implementation, monitoring, and evaluation.

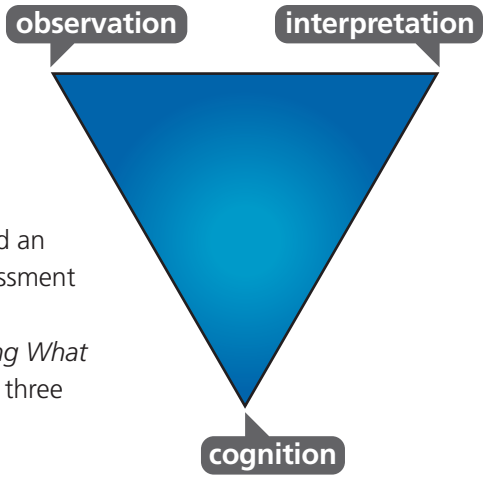
Assessment as a process of evidentiary reasoning

We assess students to make judgments about what they know and can do, but assessment does not offer a direct pipeline into a student's mind. Assessing educational outcomes for children is not as straightforward as measuring height or weight; the attributes to be measured are mental representations and processes that are not outwardly visible. Thus, an assessment is a tool designed to observe students' behavior and produce data that can be used to draw reasonable inferences about what students know and can do. Deciding what to assess and how to do so is not as simple as it might appear.

The process of collecting evidence to support inferences about what students know represents a chain of reasoning from evidence about student development and learning that characterizes all assessment, from classroom quizzes and standardized achievement tests to the conversation a student has with their teacher as they read a story or work through the meaning of a text.

The first question in the assessment reasoning process is "evidence about what?" Data become evidence in an analytic situation only when one has established their relevance to some question or concern. Data do not provide their own meaning; their value as evidence can arise only through some interpretational framework. In the present context, educational assessment provides data such as spoken or written work, marks on answer sheets, or students' explanations of their thinking. These data become evidence only with respect to understandings about how students acquire knowledge and skill.

In the *Knowing What Students Know* report, the process of reasoning from evidence was portrayed as a triad of three interconnected elements, forming an "assessment triangle." The vertices of the assessment triangle (see **Figure III.2.1**) represent the three key elements underlying any assessment: a model of student **cognition** and learning in the domain of the assessment; a set of assumptions and principles about the kinds of **observations** that will provide valid evidence of students' competencies; and an **interpretation** process for making sense of the evidence in light of the assessment purpose. The three are represented as vertices of a triangle because each is connected to and dependent on the other two. A major tenet of the *Knowing What Students Know* report is that for an assessment to be effective and valid, the three elements must be in synchrony.



● **FIGURE III.2.1**
The Assessment Triangle
Source: *Knowing What Students Know* (Pellegrino et al., 2001)

Cognition

The *cognition* corner of the triangle refers to theory, data, and practice about how students represent knowledge and develop competence in a domain (e.g., reading, writing, speaking, or listening). In any particular assessment application, a theory of development and learning in the domain is needed to identify the set of knowledge and skills that is important to assess for the intended context of use, whether that be to characterize the competencies students have acquired at some point in time to make a summative judgment, or to make formative judgments to guide subsequent instruction so as to maximize learning. A central premise is that the cognitive theory should represent the most scientifically credible understanding of typical ways in which learners represent knowledge and develop expertise in the domain of interest.

Observation

Every assessment is also based on a set of assumptions and principles about the kinds of tasks or situations that will prompt students to say, do, or create something that demonstrates important knowledge and skills. The tasks to which students are asked to respond on an assessment are not arbitrary. They must be carefully designed to provide evidence that is linked to the cognitive model of learning and to support the kinds of inferences and decisions that will be made on the basis of the assessment results.

The *observation* vertex of the assessment triangle represents a description or set of specifications for assessment tasks that will elicit illuminating responses from students. In assessment, one has the opportunity to structure some small corner of the world to make observations. The assessment designer can use this capability to maximize the value of the data collected, as seen through the lens of the underlying assumptions about how students learn in the domain.

Interpretation

Every assessment is also based on certain assumptions and models for interpreting the evidence collected from observations. The *interpretation* vertex of the triangle encompasses all the methods and tools used to reason from the observations. It expresses how the observations derived from a set of assessment tasks constitute evidence about the knowledge and skills being assessed.

In the context of some assessment, the interpretation method is based on scores that are indicative of varying levels of performance. In the context of other assessment, the interpretation can be based on an intuitive or qualitative model rather than a quantitative one. Even informally, teachers often make coordinated judgments about what aspects of students' understanding and learning are relevant, how a student has performed on one or more tasks, and what the performances mean about the student's knowledge and understanding.

A crucial point is that each of the three elements of the assessment triangle not only must make sense on its own, but also must connect to each of the other two elements in a meaningful way to lead to an effective assessment and sound inferences. Thus, to have a valid and useful assessment, all three vertices of the triangle must work together in synchrony. Central to this entire process are theories and data on how students learn and what students know as they develop competence for important aspects of a domain such as literacy.

Starting with a model of development and learning is critical, since the model suggests the most important aspects of student achievement about which one would want to draw inferences, and provides clues about the types of assessment tasks that will elicit evidence to support those inferences for whatever goal one has in mind with respect to using that information.

A system calls for multiple assessments

Any valid and useful literacy assessment will involve a process of reasoning from evidence about some key aspect of the development of reading, writing, speaking or listening. Thus, a system of literacy assessment necessarily involves multiple such assessment tools and practices. These multiple assessment tools and practices would focus on key elements of the development of early literacy and would be used by various individuals to make judgments about student progress. Sections III-3 and III-4 provide background information and guidance with respect to four key aspects of the individual and collective set of assessment tools and practices that should be chosen to make up an early literacy assessment system:

1. how they relate to knowledge from theory, research and practice about the development of components of literacy,
2. the interpretive purposes they would be intended to fulfill in promoting literacy development,
3. the types of assessment that could be used for specific components of literacy, and
4. desirable properties of such assessment in terms of validity, reliability and fairness.

All of the information provided in Sections III-3 and III-4 is predicated on the core assumption that (a) assessment of early literacy is a process of reasoning from evidence connected to theoretically and empirically sound conceptions of literacy development and (b) the assessment tools are well designed and provide high quality information for the intended interpretive use. These assumptions lie at the core of an early literacy assessment system.

In what follows, we focus on the broader criteria that need to be used in the process of selection and assembly of assessment tools and practices for them to function together, i.e., the ways they need to relate to each other to serve as a balanced "assessment system." The **Portraits** in **Section II** illustrate the multiple aspects of the development of literacy that educators are interested in assessing. They provide examples of how assessment practices and tools might reflect a rich, interconnected model of literacy development and how they can fit together across time and use context, in ways that are consistent with three important system design properties: coherence, comprehensiveness, and continuity.

Criteria for balanced assessment systems

As noted at the beginning of this Guide, *"a collection of assessments does not entail a system any more than a pile of bricks constitutes a house"* (Coladarci, 2002). Assessment systems are balanced when the various assessment tools and practices in the system:

a. are coherently linked through a clear specification of the learning targets,

b. comprehensively provide multiple sources of evidence to support educational decision making, and

c. continuously document student progress over time (Pellegrino et al., 2001).

These properties—coherence, comprehensiveness, and continuity—create a powerful image of a high-quality system of assessment, rooted in a common model of development and learning.

Coherence

By *coherence*, we mean that the models of student learning underlying the various assessments within the system should be compatible. While a large-scale state assessment might be based on a model of learning that is coarser than that underlying the assessments used in classrooms, the conceptual base for the state assessment should be a broader version of one that makes sense at the finer-grained level. In this way, the external assessment results will be consistent with the more detailed understanding of learning underlying classroom instruction and assessment.

As one moves up and down the levels of a system, from the classroom through the school, district, and state, assessments along this vertical dimension should align. As long as the underlying models of learning and development are consistent, the assessments will complement each other rather than present conflicting goals for learning.

In addition to vertical coherence among assessments that range from the classroom to the district to the state level, we should also be concerned about coherence among classroom assessments serving various purposes (e.g., grading, formative feedback). Horizontal coherence is the alignment among curriculum, instruction, and assessment with the goal of helping students develop proficiency in a content domain (Pellegrino et al., 2001).

Comprehensiveness

By *comprehensiveness*, we mean that a range of assessment approaches should be used to provide a variety of evidence to support educational decision making. In an area such as early literacy development, multiple assessments are needed to cover the depth and breadth of the many facets of literacy development that we need to evaluate. No single assessment result can be considered a definitive indicator of a student's knowledge and skill. Information from multiple assessments enhances the validity and fairness of the inferences drawn by giving students various ways and opportunities to demonstrate their competence. Multiple measures can also be used to provide evidence that improvements in test scores represent real gains in learning, as opposed to score inflation due to teaching narrowly to one particular instrument (e.g., Koretz, 2009).

Continuity

An ideal assessment system should be designed to be *continuous*. That is, assessments should measure student progress over time, akin more to a videotape record rather than to the snapshots provided by most current tests. To provide such pictures of progress, multiple sets of observations over time must be linked conceptually so that change can be observed and interpreted. Models of student progress in learning should underlie the assessment system, and assessments should be designed to provide information that maps back to the progression.

In **Section I** we provided a graphical illustration of how a multi-level assessment system might look and mentioned some of the factors that would serve to achieve balance and support these three principles. **Figure III.2.2** refers back to that illustration and highlights four critical features that make it a balanced and integrated system relative to literacy. We also note where in this Guide we elaborate on what needs to be considered for each of the four features.

An Integrated System

- Unified by common learning goals derived from learning theory, research, & content standards (Chapter III-3)
- Synchronized by unifying progress variables that map out expected trajectories of learning and development (Chapter III-3)
- Coordinated within and across system levels & purposes (Chapter III-4)
- Use of quality assessment tools aligned to specific literacy components and levels of proficiency (Chapter III-4)

● **FIGURE III.2.2**

Example of a Multi-level assessment system that illustrates coherence, comprehensiveness, and continuity.

Systems within systems

The three criteria discussed above can be used in the conceptualization, design, and/or evaluation of an ELAS. But systems do not stand alone; it is important to recognize that we also need to take into consideration the reality that systems typically reside within other systems. As conceptualized in *Systems for State Science Assessment* (Wilson & Bertenthal, 2006):

- systems are organized around a specific goal;
- systems are composed of subsystems, or parts, that each serve their own purposes but also interact with other parts in ways that help the larger system to function as intended;
- the subsystems that comprise the whole must work well both independently and together for the system to function as intended;
- the parts working together can perform functions that individual components cannot perform on their own; and
- a missing or poorly operating part may cause a system to function poorly, or not at all.

This idea of systems within systems is noted explicitly in Principle #1 and discussed in Section III-1. The ELAS must be in balance with other school, district, and state level systems related to curriculum, instruction, assessment, professional learning, and accountability. And within the assessment system there will be sub-systems that operate at different levels and serve different purposes.

Examples would be assessments designed for different purposes (see Section III-4) that operate at the classroom and/or district levels, as well as across levels of the Pre-K through 12 system.

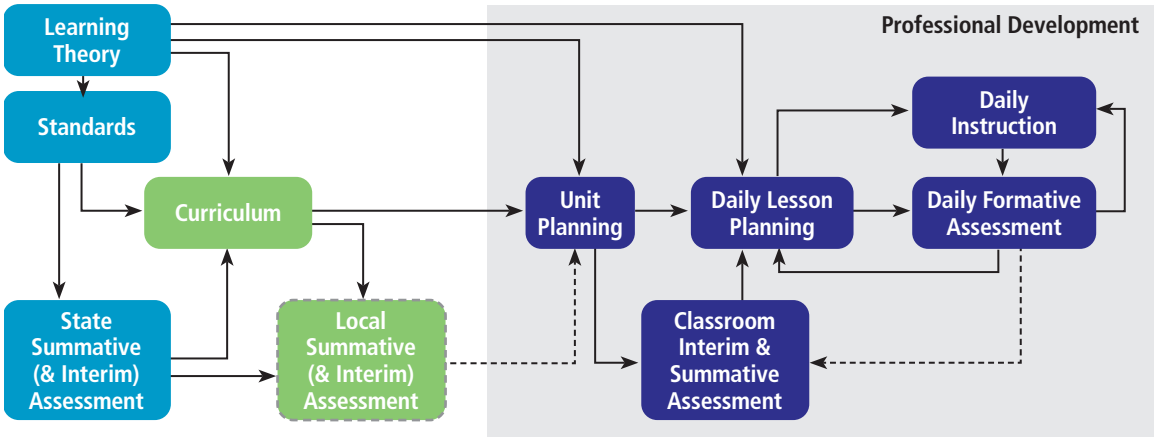
Because there can be considerable complexity associated with planning for and designing the assessment system, given the purposes it is intended to serve and the levels at which it is intended to operate, developing an ELAS theory of action and explicating a logic model for the system can be beneficial and essential in going about this process. These ideas are considered and developed below.

"The ELAS must be in balance with other school, district, and state level systems related to curriculum, instruction, assessment, professional learning, and accountability. And within the assessment system there will be sub-systems that operate at different levels and serve different purposes."

Developing a theory of action and logic model for the ELAS

A common problem across and within state, district, and classroom assessment levels is that the assessment components are not conceptually coherent—they don't align to the same conception of literacy. This can often produce conflicting results and inferences about students. Consequently, the use of these assessments doesn't lead to the desired outcome of educational improvement. It is therefore essential to make explicit one's assumptions about literacy and a "theory of action" related to the use of information derived from the system of assessments.

Figure III.2.3 shows a simplified version of the components of a standards, curriculum, instruction, and assessment system at state, district, school and classroom levels.



● **FIGURE III.2.3**

A "Simple" Theory of Action Relating Teaching, Learning, and Assessment

Notice that everything flows from theory and research on literacy development and learning. Much more would need to be articulated as part of the theory of action about how each of the elements shown above relate to each other and what each is intended to accomplish relative to the goal of supporting the development of literacy. In addition, what is included within each of the boxes and how they function would be part of the elaboration of the system model and the theory of action for how the system is supposed to work.

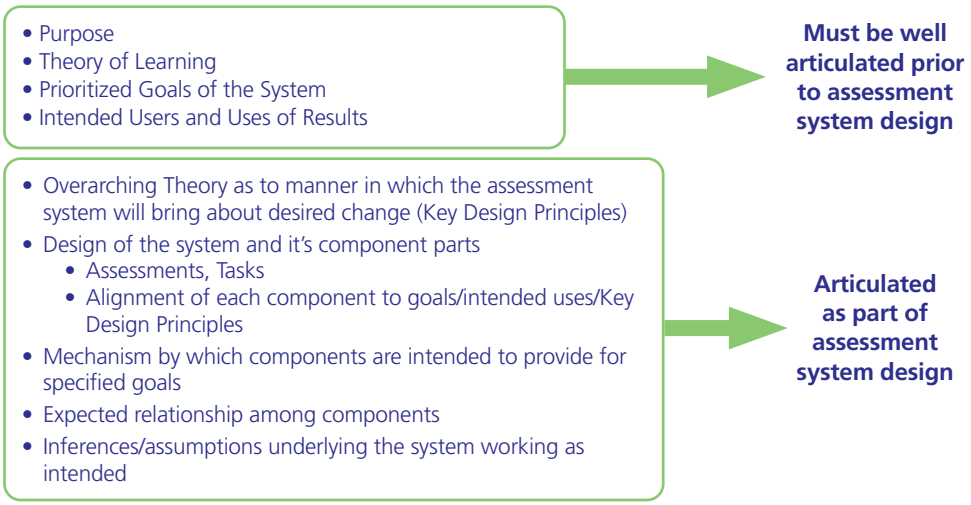
Notice also that much of the action in this representation is focused close to the classroom (area shaded gray), where coordination is needed among curriculum, instruction, and various types of assessment. The Figure III.2.3 also highlights a point made earlier in Section III-1 that effective system operation hinges on teacher expertise, including ongoing opportunities for professional learning.

A theory of action for an ELAS can be conceptualized as an empirically and logically stated argument. It can express a set of underlying assumptions about what something is supposed to do, how it is supposed to function and what is supposed to result. As such, it can serve as a set of testable hypotheses. When clearly articulated, the theory of action outlines how and why a given assessment or system, as designed, will support the achievement of specified goals. It requires specification of each component of the assessment system, the connection(s) between components, and the manner in which they jointly fulfill the requirements of the system.

To help develop and articulate a theory of action for an ELAS, it is recommended that the district's ELAS Leadership Team lay out a "logic model" for the assessment system. A logic model forces one to specify the presumed theory of action. It helps to make explicit assumptions about how particular components are supposed to work, who is to be impacted, what the expected consequences should be, and WHY.

In a complex system, it is critical that the theory of action be articulated, especially with regard to how assessment information is to be used to improve outcomes over time—who will use what information and how. Competing theories of action can be made explicit in the system design phase—choices can be made based on the quality of the evidence and/or argument in favor of adopting one theory in lieu of alternatives.

Consistent with the above, **Recommendations – 1.4, 1.5, 1.6 and 1.7** indicate that the ELAS Leadership Team should lay out a logic model for system design, implementation, and evaluation of the ELAS. The logic model development process forces attention to: a) existing conditions, b) resources, c) inputs, d) outputs, and e) proximal and distal outcomes.



● **FIGURE III.2.4**
Pieces in Articulating the Theory of Action and Logic Model for an ELAS

There is a focus not only on the elements of the system but most especially on the assumed logical and causal relationships among them. The logic model enables monitoring the building of the ELAS and its enactment. It also enables strategies for evaluation of the ELAS along the way and for adjustment and correction as needed. **Figure III.2.4** provides a glimpse of what needs to be considered in this process.

Tools/Resources for PHASE I, Principle #2:

Tools Specific to Logic Models and Theory of Action

The development of a theory of action for the assessment system and a logic model for the system components and design is a challenging task that takes time. These selected resources can guide district ELAS Leadership Teams and others through this process.

Logic Model Development Guide (W.K. Kellogg Foundation, 2004)

The W.K. Kellogg Foundation Logic Model Development Guide focuses on the development and use of the program logic model. The logic model and its processes facilitate thinking, planning, and communications about program objectives and actual accomplishments. This guide provides an orientation to the underlying principles and language of the program logic model so it can be effectively used in program planning, implementation, evaluation, and dissemination of results.

Available at: https://www.bttop.org/sites/default/files/public/W.K.%20Kellogg%20LogicModel.pdf

Logic Models for Program Design, Implementation, and Evaluation: Workshop Toolkit (Institute for Education Sciences, 2015).

This Toolkit is designed to help practitioners learn the purpose of logic models, the different elements of a logic model, and the appropriate steps for developing and using a logic model for program development and evaluation. The toolkit includes an agenda, slide deck, participant workbook, and facilitator's manual. The materials have been designed for use by schools, districts, states, and other groups serving them.

Available at https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=401

Theories of Action Aren't Enough: An argument for Logic Models

This article by Juan D'Brot provides some helpful ways to think about and work with theories of action and logic models.

Available at https://www.nciea.org/blog/assessment/theories-action-arent-enough-argument-logic-models

Tools Specific to Assessment Audits or Inventories

The development of a theory of action for the assessment system and a logic model for the system components and design is a challenging task that takes time. These selected resources can guide district ELAS Leadership Teams and others through this process.

District Assessment System Design (DASD) Toolkit (National Center for the Improvement of Educational Assessment, 2018)

This toolkit is useful for districts to determine users of assessment, the different ways that assessment information can be used, and which assessment approaches are most valuable in meeting the assessment information needs of different assessment users in the district.

Available at: https://www.nciea.org/featured-resources

Student Assessment Inventory for School Districts (Achieve, 2014)

This toolkit guides district leaders in taking stock of how many assessments are administered throughout a school year and for what purposes they give assessments. Designed from a student perspective, the audit tool can be used by leaders to make decisions about what amount of testing is appropriate and to be more transparent with parents about the testing in schools.

Available at www.achieve.org/assessmentinventory.

A listing of all Tools and Resources mentioned in this Guide to help you develop an early literacy assessment system (ELAS) is available online at **www.MichiganAssessmentConsortium.org/ELAS.**

SECTION III-3

LITERACY DEVELOPMENT AND LEARNING: Features of an early literacy assessment system that reflect what we know

This chapter describes what we know about the learning and development of literacy and how this knowledge can be helpful in informing the selection of valid and useful tools and practices to be used to assess early literacy learning. It also provides information useful in creating a district early literacy assessment system (ELAS) that reflects what we know about the whole child. The content provides some of the relevant explanation and backing for ***Principle #3*** *and associated* ***Phase II Implementation Recommendations****—in particular Recommendations 2.2 and 2.3.*

Phase II RECOMMENDATIONS (Principle #3)
Principle #3—The ELAS must reflect what we know from theory, research, and practice about the LITERACY DEVELOPMENT.
2.1: The **ELAS LEADERSHIP TEAM** should use the logic model and theory of action (called for in Phase I) to guide the selection and implementation of assessment tools and resources for inclusion in the system.
The **ELAS LEADERSHIP TEAM**, in collaboration with **PRINCIPALS AND TEACHERS**, should:
2.2: Select individual assessment resources on the basis of evidence of their capacity to provide construct(s)-relevant and instructionally valuable information about a student's literacy development and growth in a given literacy domain(s) – reading, writing, speaking, or listening.
2.3: Select individual assessment resources on the basis of evidence that they are developmentally appropriate and respectful with regard to the cognitive, social, emotional, cultural, and performance demands they place on children.

Introduction

We begin with a characterization of literacy development to make the point that literacy is, in fact, *always* in development as texts, tasks, and purposes for using literacy change. Consider the following examples:

- A two-year old turns each page of a well-worn children's book and repeats with each page, "Are you my mother?"
- A four-year old, displaying a mix of drawings, scribbles, and letters, asks that you "listen to my story."
- A ten-year old considers the evidence collected from an investigation of condensation and writes an explanation for the water that has collected on the outside of a glass.

- A fourteen-year old considers how two accounts of an historical event compare and contrast.
- A twenty-year-old wrestles with learning an obscure form of code for her start-up company.
- An elder reads the labels on two of his prescriptions and wonders whether they should be taken together.

Each of these represents a literacy event and illustrates the range of literacies in which we engage over the lifespan. Literate activity, such as recognizing street-signs, playing with rhyming sounds, and using a longer string of squiggles to represent a longer word, emerges long before conventional reading and writing, and there really is no end point in literacy development. Furthermore, new kinds of social communication, hypertext, and "the Internet of everything" all have profound implications for the forms of literacy that will support productive engagement in contemporary society. Our point is that what is "developmentally appropriate" in the way of literacy assessment is more complex than might appear at first blush.

"Literate activity, such as recognizing street-signs, playing with rhyming sounds, and using a longer string of squiggles to represent a longer word, emerges long before conventional reading and writing, and there really is no end point in literacy development."

Michigan's Action Plan for Literacy Excellence 2017-2020 defines literacy as "the ability to read, view, listen, write, speak, and visually represent to comprehend and to communicate meaning in various settings through oral, written, visual, and digital forms of expression." (Michigan Department of Education [MDE], 2017, p. 8). The Educational Testing Service provides an expanded definition of literacy to include: "the deployment of a constellation of cognitive, language, and social reasoning skills, knowledge, strategies, and dispositions, directed towards achieving specific purposes" (Sabatini, Bruce, & Steinberg, 2013, p. 7). This definition, in hand with Michigan's definition, is useful because it reflects contemporary standards movements (such as the *Common Core State Standards*, *Next Generation Science Standards*, and *National Council for the Social Studies Curriculum Standards*). Also, it embraces the broad range of processes and factors, such as prior knowledge, metacognition, self-regulation, reading strategies, student motivation, and student engagement that influence literacy learning and development. This is why **Recommendation 2.2** takes an expansive view of the learner.

Required features of an ELAS

Consistent with the focus of this Guide, we will focus on development and learning from pre-kindergarten through third grade. We propose features that ensure the ELAS:

- is developmentally sensitive.
- identifies whether students are receiving excellent early instruction.
- identifies students who may have risk factors so that these children receive effective literacy intervention programs as early as possible.
- yields information that is useful to guiding teacher decision making so that literacy instruction can be tailored to the various profiles of strengths, challenge, and interests that students present.
- is informed by the range of processes and factors that explain literacy achievement.

- takes into consideration the complexities of reading comprehension and reflects the dynamic and developmental nature of comprehension.
- provides information on students' interests so that educators can use this information in planning instruction, and takes students' interests into account when reporting assessment results.
- applies an asset orientation motivated by the question, "What knowledge and skill is the learner bringing to the table?"

ELAS FEATURE 1: A literacy assessment system should be research-based and developmentally sensitive.

It is perhaps obvious that the tasks and tools that we use to assess literacy for a kindergarten child should differ from those used to assess a third-grader. This feature emphasizes that we should be drawing on research regarding *how literacy develops* and *individual differences in literacy development*, as we decide what should be included in an ELAS.

For example, an assessment system appropriate for young children needs to provide the teacher with information regarding foundational skills of reading. These skills include phonological processing (e.g., blending syllables or phonemes to form a word), print awareness (e.g., knowing the difference between a word and a letter), and oral language. We know that children who are more adept with these foundational skills profit more from reading instruction; they learn to read sooner, and they are better readers than children with fewer of these skills (National Institute of Child Health and Human Development [NICHD], 2000; Snow, Burns, & Griffin, 1998).

Teachers armed with information about the emergence and development of these foundational skills can take them into consideration when planning instruction; for example, providing children who are still acquiring phonological processing skill with opportunities to acquire this skill, but not wasting the time of children who have already acquired this skill. The document titled ***Free or Very Low Cost Early Literacy Assessments with Diagnostic Value and Demonstrated Reliability and Validity*** (Duke, Lindsey, & Brown, n.d.) provides a helpful list of assessments that provide useful information regarding the skills requisite to literacy development (see Tools/Resources for Phase II).

Young children vary a great deal on these foundational skills (e.g., Justice & Ezell, 2001 regarding print awareness); the teacher who is aware of this variation can take it into consideration when planning instruction. The **Portraits** in this Guide illustrate the many ways that children's literacy knowledge and skill can vary even when they are the same age.

Research also tells us that the relationship between word reading skills and comprehension changes over time (Ahmed et al., 2016; Cain & Oakhill, 2012; Storch & Whitehurst, 2002). While word reading skill strongly predicts comprehension among young children, vocabulary knowledge and background knowledge are stronger predictors of comprehension as children get older and as they read more challenging texts. This means that it is important to assess comprehension and not assume that a child who reads words fluently is necessarily comprehending.

We know that children perform differently when being assessed with narrative versus informational text; informational texts are typically harder for younger readers to read (McNamara, Graesser, & Louwerse, 2012). This could be a function of experience; it could be a function of how informational texts are written (e.g., how the ideas are organized and presented); or it could be because of vocabulary demands. This means that it is important to attend to how children understand both narrative *and* informational text.

An additional idea that is helpful to consider when thinking about literacy development is that some reading skills are "constrained" and some are "unconstrained" (Paris, 2005). Constrained skills are those that develop from non-existence to a high level of proficiency in early childhood. Examples of constrained skills include knowledge of the alphabetic principle (i.e., knowledge that written spellings systematically represent spoken words) and phonemic awareness (e.g., knowledge that spoken words can be conceived as a sequence of phonemes). Unconstrained skills include vocabulary and comprehension; they continue to develop through the lifespan.

"Assessments should distinguish between constrained and unconstrained skills because of their scope and different developmental trajectories. Furthermore, it is important to guard against the assumption that the instruction of constrained skills should take priority over other skills; mastery of constrained skills does not ensure the development of unconstrained skills."

What is the relevance of this distinction when thinking about developmentally sensitive assessment? Assessments should distinguish between constrained and unconstrained skills because of their scope and different developmental trajectories. Furthermore, it is important to guard against the assumption that the instruction of constrained skills should take priority over other skills; mastery of constrained skills does not ensure the development of unconstrained skills. Finally, it is important to be cautious about the use of proxies; for example, while print knowledge measures are indeed correlated with later reading achievement, the *moderator* may be parent education, parent-child interactions, or access to literacy resources. These are all factors that continue to be influential in a child's reading development.

The **Portraits** in Section II reveal multiple ways in which educators engage in developmentally sensitive assessment; consider, for example, the teachers' use of early childhood standards to guide their decision making about the features of literacy development to which they attend over time. Furthermore, we see evidence of the ways in which the foci of assessment change as the children matriculate through the grades and the expectations regarding the nature of—and purposes for using—text change over time. For example, in kindergarten, the teachers are systematically attending to alphabet knowledge, phonological awareness, and concepts of word. By the time the three students are in second grade, their teacher is attending to the students' use of context clues to ascertain the meaning of unfamiliar words, morphological analysis, and vocabulary knowledge.

ELAS FEATURE 2: A literacy assessment system should identify whether students are receiving excellent early instruction.

This feature reminds us that—before concluding there is something wrong with the child—it is important to ascertain that the child has received appropriate learning opportunities.

Excellent classroom instruction has long been extolled as a major prevention strategy (Snow et al., 1998) and has been associated with such long-term benefits as less

grade retention, less likelihood of being referred for special education services, and higher graduation rates (Scanlon, Vellutino, Small, Fanuele, & Sweeney, 2005; Schweinhart, Berrueta-Clement, Barnett, Epstein, & Weikart, 1985). Specific to literacy achievement, there is a more complex story; longitudinal research that was conducted in high-poverty schools (Mehta, Foorman, Branum-Martin, & Taylor, 2005)—using multiple indicators of teacher quality, instruction, and student literacy achievement—suggests that the best predictor of literacy achievement takes into consideration the *combined* effects of teacher quality, instruction, *and* classroom composition (i.e., student language competence and prior achievement).

One way to think about this is that excellent literacy instruction is particularly important in classroom contexts in which there are significant numbers of children who enter the classroom with low language and literacy skills. Furthermore, the determination of what constitutes excellent literacy instruction involves multiple instructional components that interact with and support one another (Pressley et al., 2001, studied in grade 1). The document *Essential Instructional Practices in Early Literacy: Grades K-3* (MAISA/GELN/ELTF, 2016) and related online modules provide extensive information about what to look for to ascertain the quality of literacy instruction (see Tools/Resources for Phase II).

With respect to the **Portraits**, recall that the teachers maintain data binders documenting where each of their children are with respect to specific standards or components of standards. This practice is consistent with gathering information that ensures students are receiving excellent early instruction. Indeed, the teachers use this information not only to document growth on the part of their students, but also as grist for reflecting on how they will continue to improve their curriculum and instruction.

ELAS FEATURE 3: A literacy assessment system should be capable of identifying students who may have risk factors so that these children receive effective literacy intervention programs as early as possible.

This feature focuses on the predictive value of the assessments used in the system.

Children most at risk for reading difficulties in the primary grades are those who begin school with:

- fewer verbal skills (e.g., storytelling, vocabulary knowledge),
- less phonological awareness (e.g., noticing rhymes; clapping along with each syllable in a phrase; noticing that the pronunciation of words like, "bed," "bark," and "banana" all begin the same way),
- less letter knowledge (i.e., ability to name printed letters), and
- less familiarity with the basic purposes and mechanisms of reading (Snow, 2002).

Longitudinal correlational studies of the development of reading show that reading problems become increasingly hard to change over time; furthermore, individual differences in reading skills become remarkably stable by second grade (Schatschneider, Wagner, & Crawford, 2008). All of this suggests that a powerful ELAS will attend to these indicators of success and challenge and will be designed with the goal of determining who will profit from well-designed, tailored reading instruction in the foundational skills described above.

Evidence of this claim is provided by the research of Vellutino and his colleagues (2006). Using intervention research, they determined that early reading difficulties in most readers who struggled with reading tasks in first grade can, in fact, be successfully remediated. They found that reading difficulties were best explained by differential learning opportunities (in both in- and out-of-school contexts), rather than by cognitive differences on the part of the children.

"... findings led the researchers to conclude that either kindergarten intervention alone, or kindergarten- and first-grade intervention combined, can prevent long-term reading difficulties in the majority of children identified as at risk for such difficulties at the beginning of kindergarten."

Furthermore, they replicated this finding with kindergarten students; they found that 58% of the children who were involved in the intervention in kindergarten and continued to need—and received—remedial assistance in first grade performed at average levels on all measures of reading achievement at the end of first, second, and third grades. These findings led the researchers to conclude that either kindergarten intervention alone, or kindergarten- and first-grade intervention combined, can prevent long-term reading difficulties in the majority of children identified as at risk for such difficulties at the beginning of kindergarten.

Reflecting on the **Portraits**, perhaps as a consequence of frequent ear infections, Emma's articulation and her difficulties identifying and generating rhyming words suggest to her teachers that she may be at risk for difficulty with important component skills of reading, such as phonological awareness and phonological processing. Consistent with ELAS Feature 3, the teachers use observational data, as well as screening data, to ensure that Emma, even while in a prekindergarten program, receives appropriate support services (i.e., with a speech and language pathologist) that may serve to mitigate against long-term consequences of these risk factors. Furthermore, multiple individuals participate in the intervention, including her teachers and parents.

ELAS FEATURE 4: A literacy assessment system should yield information that is useful to guiding teacher decision making so that literacy instruction can be tailored to the various profiles of strength, challenge, and interests that students present.

This feature focuses on usefulness. It is possible to have an assessment system that includes a number of reliable measures but is not all that useful to teachers. To understand why usefulness is such an important feature, we point to the research of Carol Connor and her colleagues.

"Receiving high-quality instructional opportunities at a single grade level did not protect students from reading difficulties if they received lower-quality instruction in later grades."

Studies of literacy learning reveal that children who have the same instructional opportunities respond differently to these opportunities. For example, in a systematic and wide-reaching program of research, Connor and her colleagues (Connor, 2019) determined that students with weak decoding skills made greater gains when they were in classrooms in which the teachers committed more instructional time to teaching phonics and fluent reading, while students with stronger decoding skills made weaker reading gains in these same classrooms. Furthermore, students with weaker vocabulary knowledge made weak gains in classrooms in which they were asked to spend significant amounts of time reading independently, whereas children with stronger vocabulary skills made greater gains in these classrooms. Finally, students with weaker decoding skills showed greater gains when teachers gradually increased the amount of independent, meaning-focused instruction across the school year.

These findings regarding child-by-instruction interactions were observed in preschool (Connor, Morrison, & Slominski, 2006), in second grade (Connor, Morrison, & Underwood, 2007), and in third grade (Connor, Morrison, & Petrella, 2004). What is especially noteworthy about this program of research is that there were no "inoculation effects;" in other words, receiving high-quality instructional opportunities at a single grade level did not protect students from reading difficulties if they received lower-quality instruction in later grades. Instead, individualized literacy instruction needed to be delivered effectively across grades one through three for students to attain grade-level literacy expectations.

ELAS Feature 4 urges that assessment provides information that will guide teacher decision making so that instruction is tailored to the strengths and challenges presented by each of the students. While this feature is evident throughout the **Portraits**, there are several particularly striking examples. One is the use of the data binder in which teachers enter data specific to standards or components of standards; these data support the teachers in monitoring the progress of students and adjusting instruction accordingly. In fact, the teachers are portrayed "handing off" the data binders, ensuring that all teachers have access to data with which to plan subsequent instruction. As another example, recall that when Emmanuel provided ample evidence that he had mastered word reading, his teacher focused on reading fluency, especially prosody. Similarly, this systematic monitoring, hand-in-hand with the use of the spring benchmark assessment, led Emma's teachers to recommend that Emma attend summer school, which ultimately increased her word reading skills. A final example is the formation of needs-based small groups in first grade, ensuring that students are receiving instruction appropriate to their strengths and challenges.

ELAS FEATURE 5: A literacy assessment system should be informed by the range of factors that account for literacy achievement.

As descriptions of ELAS Features 1– 4 suggest, there are a number of factors that account for literacy achievement; furthermore, the factors play different roles over time (see Feature 6). Thus, a solid assessment system should address this range and variability of factors. We illustrate this ELAS Feature with a few examples drawn from research.

Specific to assessing comprehension, Ahmed et al., (2016) found that background knowledge, vocabulary knowledge, word reading skill, inference making, and reading strategy use all made significant direct contributions to comprehension. O'Reilly, Sabatini, & Deane's (2013) research added student motivation and engagement to this list. Indeed, research has identified many factors that account for students' reading comprehension, including—but not limited to—concepts of print, reading motivation and engagement, decoding knowledge and strategies, phonological awareness, reading fluency, vocabulary and morphological knowledge, knowledge of text structure, content knowledge, strategic reading, and executive function skills (see Cartwright & Duke, 2019).

The point of this ELAS Feature is that educators need to be able to entertain a broad range of possible explanations for students' reading achievement. In the **Portraits**, we see the range of evidence that the teachers collected to compile a rich picture of each child's literacy development; this includes evidence of: metalinguistic knowledge, phonological awareness, morphological analysis, language comprehension, word reading/fluency, vocabulary knowledge, comprehension, and reading strategies. Furthermore, the **Portraits** reveal the broad range of tools and processes that teachers use to gather evidence regarding literacy development. In these **Portraits**, we see teachers using: games; observations; writing samples; formal assessment, including computer-adaptive assessment (that provides standardized data); data binders; and retellings.

ELAS FEATURE 6: A literacy assessment system should take into consideration the complexities of reading comprehension and reflect the dynamic and developmental nature of comprehension.

"The ultimate goal of reading instruction is to support readers to comprehend, or to 'extract and construct meaning through interaction and involvement with written language'."

The ultimate goal of reading instruction is to support readers to comprehend, or to "extract and construct meaning through interaction and involvement with written language" (Rand Reading Study Group [RRSG], 2002, p.11). Reading comprehension is a complex and dynamic activity. It begins with a purpose for comprehending and conditions (e.g., texts, mood) that have been shown to affect comprehension. It is complex because at the sentence level, text comprehension depends upon the ability to process words, virtually simultaneously attending to their orthographic (spelling), phonological (sound), and semantic (meaning) representations, and connect words using rules of syntax (word order). Beyond the sentence, the reader must integrate meaning across sentences, making use of relevant prior knowledge; engage in inferencing to bring cohesion to the text; use text structure and features; and consider the authors' goals and motives (Graesser, 2015). The result of this activity is a mental representation that reflects the overall meaning—or situation model—of the text (Kintsch & van Dijk, 1978).

Reading comprehension is a dynamic activity because the variables that most strongly predict comprehension skill change over time. In the early grades, decoding skills, which include the processes that are needed to decipher written code (i.e., phonological processing, orthographic processing, and word recognition) are evident as contributors to comprehension. In the later grades, vocabulary knowledge, inference generation, and oral language are stronger contributors (Catts, Hogan, & Fey, 2003; Ehri, Nunes, Stahl, & Willows, 2001). And after grade six, inferencing skill and background knowledge are increasingly predictive of reading comprehension (Ahmed et al., 2016). Furthermore, as students advance through the grades, disciplinary knowledge (Goldman et al., 2016) and academic language skills (LaRusso et al., 2016) play an increasingly important role in comprehension. Although the strength of these contributors changes over time, that should not be interpreted to mean that instruction should address only the strongest contributors in a given developmental period.

In the **Portraits**, we see the multiple ways in which teachers are attending to comprehension. For example, we see that they are mindful of the reading diets of young children so that they get information about how students comprehend different genres of text and read for different purposes. In kindergarten, the teacher is providing students opportunities to read literature, as well as science, social studies, mathematics, and the arts. Similarly in grade 2, the teacher is attentive to the students' reading and writing in units of instruction that are designed across different content areas. Furthermore, the teachers are gathering information, through retellings and text-based discussions, regarding the processes in which students engage that promote or inhibit comprehension.

ELAS FEATURE 7: An assessment system should (a) present texts and tasks that are meaningful to learners and reflect meaningful uses of reading, (b) provide information regarding students' interests so that educators can use this information in planning instruction, and (c) take students' interests into account when reporting assessment results.

There is substantial research indicating that interest, especially situational interest (i.e., temporary *interest* based on environmental factors such as the task or a specific text), increases readers' level of involvement with the text, as well as positive affect toward reading. A number of studies have shown that children's comprehension, inferencing, deeper processing of the text, and retention are facilitated by reading personally interesting text segments, as well as by reading passages written on high-interest topics (e.g., Hidi, 2006). Furthermore, well-developed individual interests can help individuals comprehend beyond what is typical for them (Renninger & Hidi, 2011).

"A number of studies have shown that children's comprehension, inferencing, deeper processing of the text, and retention are facilitated by reading personally interesting text segments, as well as by reading passages written on high-interest topics."

Research has demonstrated that interest has a powerful facilitative effect on cognitive functioning. Its influence on academic performance has been established across individuals, knowledge domains, and subject areas. Theorists have also suggested that interest may be the key to early stages of learning, as well as to differences between expert and moderately skilled performers (Alexander, 1997; Renninger, Hidi, & Krapp, 1992; Hoffmann, Krapp, Renninger, & Baumert, 1998).

In summary, interest is important to both the motivation to read and the memorability of the text. Certain text characteristics such as ease of comprehension, novelty, surprise, vividness, intensity, and character identification contribute to situational interest. Interesting text segments produce superior reading comprehension and recall. Well-developed individual interest in an area may help individuals to cope with relevant but boring texts. Situational interest elicited by texts can maintain motivation and comprehension, even when individuals have no initial interest in the topic.

In the **Portraits**, we see the multiple ways in which teachers are attending to student interest; in fact, the pre-K teachers' initial contact with parents is largely driven by questions regarding what the children find interesting in their daily lives. The teachers make available to the students reading material designed to both stimulate and satisfy their interests. Teachers' interest inventories inform their selection of text to be included in both instructional and independent time.

ELAS FEATURE 8: An assessment system should be adaptable to individual, social, linguistic, and cultural variations.

It is widely recognized that assessment practices can serve an exclusionary purpose for students who are from minoritized groups by virtue of race, ethnicity, and/or home language (Boykin & Noguera, 2011). One way to redress this trend is to focus not only on assessment *of* learning but on assessment *for* learning (see Pellegrino et al., 2001). The focus of such assessment should be on *why* students perform as they do and *how* differences in performance should be addressed. This assessment should consider the contexts, social-cultural considerations, and experiences that are related to students' diverse backgrounds.

"It is widely recognized that assessment practices can serve an exclusionary purpose for students who are from minoritized groups by virtue of race, ethnicity, and/or home language"

For example, Solano-Flores (2011) has asserted that differences in "communication patterns, values, beliefs, and lived experiences" help to explain the comparatively lower test performance for emergent bilingual speakers, noting that English learners performed better on standardized achievement test items when the items were modified to reflect local dialect, were linguistically simplified, or were modified to be more experientially meaningful for these students. Stiggins (2002, p.1) has urged that we ask: "How can we use assessment to help all of our students *want to learn*? How can we help them feel able to learn?" Such a focus would naturally lead to questions about students' opportunities to learn and how the cultural assets they bring to the table can be used productively to enhance learning opportunities.

Consistent with **Recommendation 2.4**, the **Portraits** are filled with examples of how the teachers are bringing an asset perspective to their instruction and are using approaches to assessment that will inform their understanding of the child, including the children's—and families'—funds of knowledge that the teacher can build upon. As one example, Ms. Robins, as she teaches Ayesha, is attentive to connecting Ayesha's background knowledge to the ideas in the text. The spirit of the assessment processes—including their ongoing, informal nature, in hand with the instructional decisions they support (e.g., needs-based grouping)—is consistent with the goal of helping the students feel "able to learn" and equipping them with the knowledge and skills supportive of learning.

Tools/Resources for PHASE II, Principle #3

These tools can be adopted or adapted to help educators and educational leaders evaluate an existing assessment system and design an ELAS that reflects what we know about literacy development and learning.

Assessment for Reading Instruction, fourth edition (Guilford Press, 2019)

This book by Katherine A. Dougherty Stahl, Kevin Flanigan, and Michael C. McKenna explains in reader-friendly text how to use both formal and informal assessments to evaluate students' strengths and needs in all components of reading. It is available for purchase online.

Essential Instructional Practices in Early Literacy: Grades K to 3, and online modules (MAISA/GELN/ELTF, 2016)

This set of resources outlines ten instructional practices in early literacy that research suggests can have a positive impact on literacy development.

Available at https://literacyessentials.org.

Free or Very Low Cost Early Literacy Assessments with Diagnostic Value and Demonstrated Reliability and Validity (Duke, Lindsey, and Brown, n.d.)

Authors Nell K. Duke, Julia B. Lindsey, and Erin M. Brown provide information about valid and reliable early literacy assessment tools that are free or at very low cost.

Available at www.michigan.gov/documents/mde/Free_and_Very_Low_Cost_Assessments_FINAL_3-23-18_621439_7.pdf.

Teaching advanced literacy skills: A guide for leaders in linguistically diverse schools (The Guilford Press, 2016)

This book by Nonie K. Lesaux, Emily Phillips Galloway, and Sky H. Marietta guide school leaders through the design and implementation of advanced literacy instruction. The book includes reproducible forms and templates that can be used to design, implement, or evaluate a literacy assessment system.

Available for purchase online.

Understanding and Using Reading Assessment K-12, third edition (ASCD, 2018)

This book by reading and assessment expert Peter Afflerbach provides detailed case studies from all grade levels to illustrate reading assessment done well. It also includes 15 reproducible forms and checklists that teachers and administrators can use to optimize their reading assessment efforts.

Available for purchase online.

A listing of all Tools and Resources mentioned in this Guide to help you develop an early literacy assessment system (ELAS) is available online at **www.MichiganAssessmentConsortium.org/ELAS.**

Notes

SECTION III-4

PURPOSES, USERS, AND TECHNICAL ADEQUACY OF ASSESSMENTS: Features of early literacy assessment that reflect what we know

This chapter provides information to help districts address the needs of multiple users of assessment, who often have different purposes for assessment, within one integrated early literacy assessment system (ELAS). It describes the function of various assessment tools and practices (and their desirable inferential properties) and considers the specific components of literacy that can and should be assessed. The content provides some of the relevant explanation and backing for ***Principle #4*** *and associated* ***Phase II Implementation Recommendations.***

Phase II RECOMMENDATIONS (Principle #4)

Principle #4: The ELAS must reflect what we know about the PURPOSES, USERS, AND TECHNICAL ADEQUACY OF EARLY LITERACY ASSESSMENT.

2.1: The **ELAS LEADERSHIP TEAM** should use the logic model and theory of action (called for in Phase I) to guide the selection and implementation of assessment tools and resources for inclusion in the system.

The **ELAS LEADERSHIP TEAM**, in collaboration with **PRINCIPALS AND TEACHERS,** should:

2.4: Select individual assessment resources on the basis of evidence of appropriate levels of technical quality with respect to validity, reliability, and fairness given the intended interpretive use(s) and the potential consequences for students:

High-stakes judgments call for **high levels** of technical quality.

Lower stakes decisions require **sufficient** technical quality.

2.5: Provide technical assistance and guidance to the system's various assessment users to help ensure that they can select assessment tools and practices that best meet their information needs and then use the results from assessment in appropriate and technically defensible ways.

Introduction

There are several challenges in developing a cohesive assessment system where multiple users of assessment (e.g., teachers, students, families, administrators, policymakers) use different types of assessment data for various purposes. In this section, we address these challenges and make specific recommendations for building a cohesive system, where each user understands the important decisions that other users make as well as the types and desirable properties of the assessments to make those decisions.

The science on literacy development is vast and rapidly expanding. Districts need someone in their district or consulting with their district (e.g., ISD) who has time devoted to continuing education specifically in the area of reading, and/or writing.

In starting this discussion, we distinguish between two basic functions of educational assessment. **Assessment *for* learning** describes the *processes* that occur daily during instruction that help teachers plan instruction and adjust it as needed, based on student learning as it is occurring. Teachers use observational data, interviews with students, questioning, and probing to determine students' levels of understanding and to adjust instruction "in the moment" in order to nudge student learning forward. This assessment process is formative in nature. **Assessment *of* learning** occurs at the *end of instruction*, which may be at the end of a unit of instruction, a marking period or semester, or at the end of a school year. This assessment is summative in nature. It might consist of a state assessment, or formal tests developed and used by a teacher. The goal of summative assessment is to see where students are in the trajectory of their learning so that, if necessary, an intervention can be determined and implemented.

Both assessment functions are important but are different from each other. Used together, they provide a more balanced approach to assessment. For example, a second-grade teacher assesses students on which syllable types they can read. She uses the results of this assessment for learning to flexibly group and re-group her students for small-group, targeted instruction—a powerful tool for moving students' learning forward (e.g., Foorman, Beyler, Borradaile, Coyne, Denton, Dimino,… Wissel, 2016). Although such data serves a very important instructional purpose, it may not provide accurate information about the likelihood that a student will meet grade-level standards. On the other hand, an administrator needs information from assessment of learning about how many students might not meet grade level standards so that she can allocate resources (personnel) for supplemental intervention for those students.

This implies that we need a *system* of assessment to meet the needs of multiple stakeholders. Each stakeholder also needs to be aware of the instrumental function of assessment tools and processes used by other professionals to improve learning outcomes for students. Therefore, increasing the assessment literacy among all stakeholders is beneficial for promoting learning for all students.

Four essential factors to consider

We identify four essential factors of an assessment system that stakeholders need to consider, particularly for literacy decisions in kindergarten through grade 3:

1. **Users** – Stakeholders need data from assessment to answer the questions that are relevant to their roles and responsibilities for moving student learning forward.
2. **Decisions** – Each user must first identify the question that they are seeking to answer, before choosing an assessment or interpreting the assessment data.
3. **Technical adequacy** – In order to appropriately answer the question identified, an assessment needs to demonstrate the level of technical rigor necessary for that particular decision.
4. **Content** – Each user must know the specific domains of literacy that an assessment measures and how that domain relates to overall achievement in reading.

Users

Children and families. Young learners can actively participate in assessment for learning activities in the classroom in order to have agency in their own learning. Families typically use results from various classroom assessment activities, both formative and summative, to understand how their child is progressing in their literacy development, how much progress their child is making toward grade-level expectations, and whether or not their child needs additional support in order to meet grade-level expectations.

Teachers. Starting with an instructional plan, teachers use the formative assessment process to determine targets for student learning, the instructional strategies to be used, when (and how) levels of student understanding will be checked as the lesson unfolds, and most importantly, what changes to instruction within the lesson might be needed, depending on what students indicate they know and can do, in order to nudge learning forward. They make these decisions in the moment of teaching to provide individualized feedback, for the next week when they need to re-teach certain concepts or re-assign students to different small groups. Because teachers have so many different decisions to make, including requesting further intervention for their students, they need a large range of assessment tools and practices depending on each specific purpose.

Literacy specialists or intervention teachers. Typically, students work with literacy specialists or intervention teachers after they have already been identified as needing support based on data from a district-selected assessment. Specialists need to ascertain the instructional needs for individual students via diagnostic assessment and then ensure that students receive differentiated intervention based on the diagnostic information. Specialists also use assessment to determine whether students have learned what is taught.

Other specialists in schools bring a wealth of expertise to the school to promote students' literacy development. School psychologists have a deep understanding of the uses and limitations of assessment for identifying which students need additional intervention (at Tier 2, Tier 3, or within special education). Social workers and school psychologists can also assess other factors that may impact student literacy development and recommend individualized adjustments to literacy instruction for students. Special education teachers and speech and language pathologists have extensive literacy backgrounds that can be very useful for guiding school-level curricular and instructional decisions as well as problem solving for individual students.

Administrators and school leadership teams. An important role for leaders in the school (we include decision making teams in this definition of leaders) is to make sure that students in their buildings/districts are making progress towards meeting state and district standards and that resources are allocated appropriately to best meet the building's or the district's goals. Historically, leaders interpret state assessment data and other data in grades 3 through 12 to understand student progress more broadly (i.e., compared to students in prior years, to students in other schools or districts, to classrooms that are making more or less growth, and/or to other students in the state). It is important to provide the instructional resources to the areas identified

through these data systems; however, it is more important to prevent those issues through increasing resources to building literacy in kindergarten through grade 3. Assessment processes described in this Guide (e.g., initial, extensive, progress monitoring, formative assessment process) can guide instructional decisions that have three times the impact on student literacy outcomes in kindergarten through grade 2 as the impact of instruction in later grades (Scammacca, Fall, & Roberts, 2015).

Additionally, leaders have the responsibility to use assessment to determine whether the systems-level decisions they make for their school or district are working. These leaders must also assess the implementation of their systems before they can determine which practices at their school worked or did not work.

Policymakers. The development of literacy has long been a public health initiative. When students are provided with high quality early literacy experiences (i.e., ages 4 through 8), society benefits from higher rates of high school graduation, lower incarceration rates, higher levels of employability, and improved life satisfaction (Allensworth & Easton, 2005; Balfanz, Bridgeland, Moore, & Fox, 2010; Hernández, 2012). Furthermore, when reading difficulties are identified early enough and appropriate instruction is provided in the early elementary grades, the impact of those difficulties later in life is greatly reduced and the higher costs of more intensive intervention later is prevented (e.g., Blachman, Schatschneider, Fletcher, Murray, Munger, & M. Vaughn, 2014).

Local and state policymakers play an important role in assisting educators to work successfully to provide students with needed literacy resources and instruction. Policymakers can provide human, financial, or technology resources to educators; they also can adopt policies that will support systematic administrator, teacher, or parent activities. For example, the State of Florida provided a free high-quality reading screening and diagnostic assessment statewide along with highly qualified reading coaches in every elementary school, extended training for all elementary teachers in reading instruction, and statewide technical support. Following those efforts, the percentage of students reading at grade level increased and the percentage of students at high risk of failing to meet standards decreased (Foorman, Petscher, Lefsky, & Toste, 2010).

Decisions

Another significant challenge with developing a cohesive assessment system stems from the competing demands of collecting enough information to make the informed decisions needed to support student literacy development while at the same time minimizing the time spent in assessment that could potentially reduce valuable instructional time. In well-meaning efforts to reduce assessment time, some assessment scores are used for purposes for which they were not designed, resulting in equally undesirable outcomes.

For example, teachers are often given data reports that are designed to indicate which students have made progress in their overall reading abilities and are told to make decisions from the data. However, this type of data provides limited information for the types of decisions that teachers need to make. When used for the purposes for which

they were designed, assessment practices lead to effective instruction that improves student outcomes (Graham et al., 2012; Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009). However, administering assessments without first making plans for how assessment information will inform instructional decisions can lead to wasted time and other resources, as well as inappropriate decisions.

Before collecting assessment data, educators need to know 1) what **decision(s)** will be made based on the data, and 2) which specific **score type(s)** from the assessment is validated for that decision. It can be difficult to articulate the questions/decisions that are being made based on data, and many times educators ask questions of the data that cannot be answered.

To help with identifying this information, the most relevant instructional decisions are provided in **Table III-4.1.** Those listed are also supported by research as having a positive impact on student outcomes. Illustrations of assessment to answer these questions are embedded in the **Portraits** under the headings "Assessment" and "Using Data to Inform Instruction."

Instead of posting student data on the wall, write the decision to be made/question to be answered in a prominent location for a reference point.

Identifying the right question

Questions answered through the **formative assessment process** for information used daily by teachers during instruction include:

- Are students learning what is being taught?
- What instructional adjustments are needed? For which students?
- What instruction is needed next for each student?

Questions answered through **student assessment collected periodically** and used by school teams to make instructional changes:

- Which (and how many) students achieved and did not achieve grade-level proficiency standards?
- Which students (and how many) are at risk for not meeting the grade-level proficiency standards; thus, need additional instructional support?
- What do the students in the school know and what are the ongoing learning needs and interests of students in the school?
- For which specific literacy skills do students need support through small-group instruction or supplemental/Tier 2 intervention or intensive/Tier 3 intervention?
- Are students making progress toward meeting end-of-year expectations? Who needs more intensive intervention?
- Does this student have a learning disability or other disability that impedes learning?

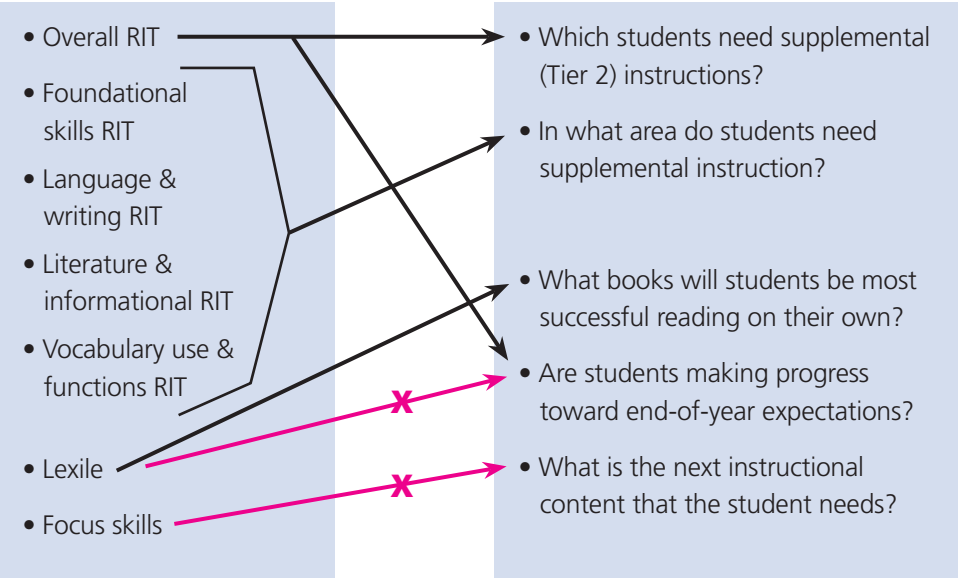
Questions answered through **periodic assessment of the school's processes** by school teams:

- Are the assessment and intervention systems at our school effective for most students?
- Is instruction being implemented as intended or do we need to provide more support to implement effective practices for students?

Matching scores to decisions

The next step is to identify which scores match each decision and which user needs each type of score. Commercial assessment tools are constantly evolving and striving to address more of the decision points listed above. It can be a challenge for schools to stay current with the research indicating which instructional decisions can be accurately associated with each type of score. As an example, the NWEA MAP assessment reports multiple scores (Overall RIT, Foundational skills RIT, Language and Writing RIT, Literature and Information RIT, Vocabulary Use and Functions RIT, Lexile, and Focus Skills), each of which is designed and validated for different purposes for different users. However, many common uses of some scores do not have research support. Examples are provided in **Figure III.4.1** of appropriate uses of scores (marked by arrows) and misuses of scores (marked by **X**).

● **FIGURE III.4.1**
Example Matching Score Types from the NWEA MAP to Decisions



Technical adequacy

In any educational assessment, there is some degree of error that affects the obtained score a student receives on a test. Assessments cannot be 100% accurate at capturing a student's true learning or knowledge level because assessment results represent only a sampling of the student's behavior, knowledge, or skill. That is, the score the child obtains is an estimate of their true skills in the area assessed plus error resulting from various sources.

Error is introduced from two primary sources: random and systematic. **Random error** is introduced when an assessment results in inconsistent scores across time, across different forms of the test, or across items within a test. **Systematic error** often results from the test design itself. If there is a certain feature of a test that systematically and consistently under- or over- estimates a student's true ability, that test feature leads to systematic error in the obtained score. For example, if a vocabulary test designed to measure students' vocabulary knowledge (breadth of vocabulary) includes items that are culturally-dependent (e.g., Hanukah), the obtained score may represent a different construct (e.g., cultural knowledge) than what was

intended (e.g., vocabulary knowledge). Both random error and systematic error can be estimated in carefully designed studies of assessment. In these studies, the degree to which random error is controlled in an assessment is called reliability. The term validity is used to describe the degree to which systematic error in the interpretation of a test is controlled.

Reliability refers to the consistency with which an assessment provides the same information about the same student, regardless of the time the student is assessed or if different forms of the assessment are given. An assessment cannot be valid without being consistent; therefore, reliability is necessary before validity can be evaluated. Reliability is reported on a scale of 0.00 to 1.00. A reliability of 0.50 means that the assessment is about as reliable as the flip of a coin.

There are different types of reliability reported for different assessment tools. These different types of reliability are included in the glossary of this Guide. Reliability information can be found in technical documentation for an assessment and at the National Center for Intensive Intervention (NCII) (https://intensiveintervention.org/). The NCII provides an independent evaluation of the reliability, validity, and fairness (i.e., bias) for many commercial screening (initial) and progress monitoring assessment tools.

Validity describes the degree to which theory and evidence support the suggested interpretation of assessment data. Validity is not a property of a test, per se; rather, it is the human interpretation of the assessment data that is valid or not. Thus, it is important to understand for which uses an assessment was validated (that is, for which uses is supportive information available)? This should be clearly stated in technical documentation. In such technical documents, assessment authors describe the construct that the assessment is designed to measure (i.e. theory) and then report the correlation between their assessment and another well-established gold standard assessment, such as a state achievement test (i.e., the supportive information).

COMMON MISPERCEPTION: GRADE LEVEL

One of the most common pieces of information that users want from literacy assessment is the student's estimated grade level of reading. If a user is asking this question, it is absolutely critical at this juncture to determine what decision the user wants to make based on that information. Often, users want to use grade level to do one of the following:

- Describe how far above or below a student is from their current grade level
- Measure growth
- Group students for instruction

Although assessment would be much more intuitive to use if grade-level information worked this way, grade-level information has NOT been validated for any of the three purposes listed above (e.g., Parker, Zaslofsky, Burns, Kanive, Hodgson, Scholin, & Slingbeil, 2015). It is important to keep in mind that the grade level reported has one purpose: to match students to the level of text they will likely read successfully when they are reading independently. However, when choosing texts for students to read independently, users should also keep in mind that information about a student's interest in the topic area of the text is more important for helping students choose books to read independently (Renninger & Hidi, 2011).

Just like reliability, validity is on a continuous scale of 0.00 to 1.00, with estimates between 0.50 and 0.70 being most common. It is important to note that different types of validity correlations are needed for different types of decisions. (See the glossary for more information on each type of validity estimate.) Different levels of reliability and validity evidence are required for different decisions.

A very important aspect of validity is associated with the consequences for students or others of using the results—consequential validity. Users must investigate both positive/negative and intended/unintended consequences of the inferences made based on an assessment result. If the assessment result is used to design instruction and leads to improved literacy development, the assessment has high positive consequential validity. On the other hand, assessment has little or negative consequential validity if the assessment results cannot be used to adjust instruction, were not used to inform further assessment, or had an adverse impact on other outcomes. Again, note here that validity is not a property of the test, but is associated with the decision made based on the results. Therefore, it is incumbent upon users to evaluate whether decisions result in positive or negative outcomes, intended or otherwise.

Fairness. Relatedly, use of assessment data may not be fair to a certain group of students if used without validity evidence. Assessment can be misused if it is systematically biased toward certain groups of students, or if the assessment data is not used as intended. This brief list demonstrates a few concrete steps that schools can take to increase fairness in their use of assessment.

- Carefully evaluate if the decisions that will be made based on this assessment align with the intended purpose of the assessment.
- Select tools for which there is documentation of the steps taken to assure fairness (that is, assure that the assessment is not biased towards any group of students). For example, it is critical to ensure that a broad range of students and educators from a wide variety of backgrounds are part of the development, review, and field testing of the assessment. This can include formal fairness reviews by experts in detecting bias and the use of statistical procedures for detecting bias[1].
- Request results of the steps taken by assessment vendors to assure the fairness of their assessment tools.
- Check the demographics of the norm groups from the technical manual. The norm group or comparison sample should contain a significant and roughly proportional number of students in each demographic category of the students found in the school (e.g., racial-ethnic, socio-economic status, English learner population, and special education status category).
- Higher stakes decisions should be based on the triangulation of several data points. This usually means integrating results from two or more assessment tools in addition to data from teacher observations or examination of students' work.

1 One common statistical procedure for detecting bias is differential item functioning. It should be noted that very few assessment tools have conducted and publicly published the results of DIF studies (as well as the steps taken to review items where DIF is detected), a shortcoming of many assessment tools.

Related to considerations of reliability, validity, and fairness, the most important implication is that **high-stakes decisions**, such as retention in grade, should never be made based on only a single test score (AERA/APA/NCME, 2014; Snow, Griffin, & Burns, 2005). A decision is high stakes when the consequences of an inaccurate decision are very high for the students involved.

- **High stakes decisions** require the highest levels of reliability, validity, and fairness, as well as multiple assessment data that support the same conclusion.
- **Moderate stakes decisions,** such as determining which students need small-group intervention outside the typical classroom, require slightly lower reliability, because errors in placement can be readily observed and corrected without consequence to the student.
- **Lower stakes decisions,** such day-to-day instructional decisions, may not require formal evidence of reliability, validity, or fairness.

As demonstrated in the **Portraits**, multiple data points were used with increasing stakes of assessment. Furthermore, the primary data points used for decisions were commensurate with the level of technical adequacy of the data point. For example, Mr. Ahmed used learning checks to create small groups in his class and then regrouped his students after Emmanuel mastered the text features component. Flexible grouping of students during instruction does not require high levels of technical adequacy in assessment, and learning checks are powerful tools for moving learning forward when used in this way. For the decision to have Ayesha receive more individualized instruction, Ms. Robins used assessments that had higher levels of technical adequacy (e.g., the benchmark assessment) and were based on several data points (across grades 1 and 2).

"Standards for the levels of reliability, validity, and fairness for many moderate stakes decisions have been set by the National Center on Intensive Instruction."

Information on the reliability, demonstrated validity for specific decisions, and fairness of assessment tools should be provided by assessment vendors to educators via technical manuals and literature that describe these technical characteristics in accessible language. Standards for the levels of reliability, validity, and fairness for many moderate stakes decisions have been set by the National Center on Intensive Instruction (https://intensiveintervention.org/) and are the standards adopted for this Guide.

Table III.4.1 provides a crosswalk between the educational decision, typical type(s) of assessment used, the level of technical adequacy required from the assessment to make the decision, and the users who are likely to make those decisions. These specific questions/decisions were chosen based on research studies indicating their utility for moving learning forward. Many of these decisions are also included in federal and Michigan policy. In the second column we match the decisions with the assessment type that educators typically use. Many educators will name the decisions by assessment type (e.g., initial, extensive, benchmarking, progress monitoring). We encourage educators to use the "decision/question" instead of naming the general type of the assessment to increase clarity and reduce confusion in data meetings.

■ **TABLE III.4.1 — Decision/Question, Assessment Users, Assessment Types, and Required Level of Technical Adequacy**

Decision/Question	Assessment Type	Required Level of Technical Adequacy	Assessment Users
Tier 1 (All Students)			
Determine students' ongoing learning needs, interests, and strengths and facilitate learning How much are students learning from instruction? Where is instruction going and how do we close the gap between where the student is and their learning target?	Criterion-referenced measures, which can serve to inform areas for re-teaching or investigating pre-requisite knowledge. Information collected by teachers during instruction using the formative assessment process. *Illustrated by the observations portion of the Portraits.*	Content validity at Level 4 in Figure III.4.2	Primary user: Teachers make day-to-day instructional decisions about literacy skills on which to focus instruction for individual or groups of students. Other users: Students use feedback from the formative assessment process to adjust their learning strategies.
Determine proficiency Who achieved the content? Who is proficient?	Summative assessment State assessment National criterion or norm-referenced tests	Reliability > .90 Content Validity	Primary users: Administrators – for accountability & resource allocation Policymakers Other users: Parents/guardians
Determine student achievement Can the students perform the curriculum/grade-level standards? Are there areas that need to be reviewed or are there areas that need to be further explored? How should students be grouped for the language and literacy block?	Summative assessment embedded in the curriculum such as quizzes & unit tests Free and Very Low Cost Assessment list *Illustrated by the lesson checks in the Portrait.*	Content validity with overall reading achievement	Primary user: Teachers and coaches making day-to-day instructional decisions about what students learned from the instruction. Other users: Students, Parents

Decision/Question	Assessment Type	Required Level of Technical Adequacy	Assessment Users
Determine risk status for meeting end-of-year expectations Which students do and do not need additional support to meet end-of-year expectations? Which students need increased intensity of intervention (Tier 2, Tier 3, special education services)?	Interim or benchmark assessment (also referred to as screening or initial assessment) that provide a "risk score" that is standardized, norm-referenced at national, state, or local level and predicts reading comprehension (Figure III.4.2 level 1) *Illustrated in the Portraits by the computer adaptive benchmark assessment.*	Reliability > .80 Predictive validity > .60	Primary user: Administrators – for resource allocation School leadership team & teachers – determining placement in standard protocol interventions
Tier 2 decisions (assessment used with students scoring below a cut-point on an initial assessment)			
Determine primary areas for instruction for students who need more support What primary components of literacy do the students who need support to meet end-of-year expectations need to be taught?	Assessments that provide information about students' strengths and weaknesses in their knowledge relative to the sub-components of literacy (Level 2 content in Figure III.4.2). Some interim assessment tools provide this extensive information alongside the initial information. *Illustrated in the Portraits by the early reading, word reading, and language comprehension results, as well as the assessment conducted by the literacy specialist.*	Reliability > .60 Concurrent Validity > .60	Primary users: School leadership team and teachers to determine placement in standard protocol interventions Teachers to make instructional grouping decisions.
Determine learning progress Are students in supplemental (Tier 2) intervention making progress toward meeting expectations?	Interim or benchmark assessment occurring in winter and spring. Either initial information (risk score indicating Level 1 in Figure III.4.2) or extensive information (Level 2 content in Figure III.4.2) can be used. *Illustrated in the Portraits by the computer adaptive benchmark assessment administered in January and May.*	Reliability > .60 Concurrent Validity > .60	Primary users: School leadership team & teachers – are interventions generally effective & which students need more intensive instruction?

Decision/Question	Assessment Type	Required Level of Technical Adequacy	Assessment Users
Tier 3 decision (assessment for students receiving intensive instruction)			
Determine learning progress of students who need more support Are students in intensive (Tier 3) intervention and special education making progress toward their individualized learning goals? Does a student have learning disabilities in areas related to literacy?	Summative assessment and progress monitoring assessment with equivalent, alternate assessment forms. These types of assessment provide information regarding students' progress toward mastering the component skills in level 3 or 4 in Figure III.4.2. *Illustrated in the assessment that Ms. Robins administers to Ayesha during What I Need time.* Assessment tools used to identify students for a learning disability need to be standardized and norm-referenced. Should occur at least monthly. For special education eligibility decisions, more frequent brief assessment may need to occur to reach the requisite minimum of 12 data points.	Alternate-form Reliability > .70 Slope reliability > .40 Slope predictive validity > .40	Primary users: School leadership team, reading specialists, school psychologists, and special education teachers – are interventions generally effective & which students need more intensive instruction?

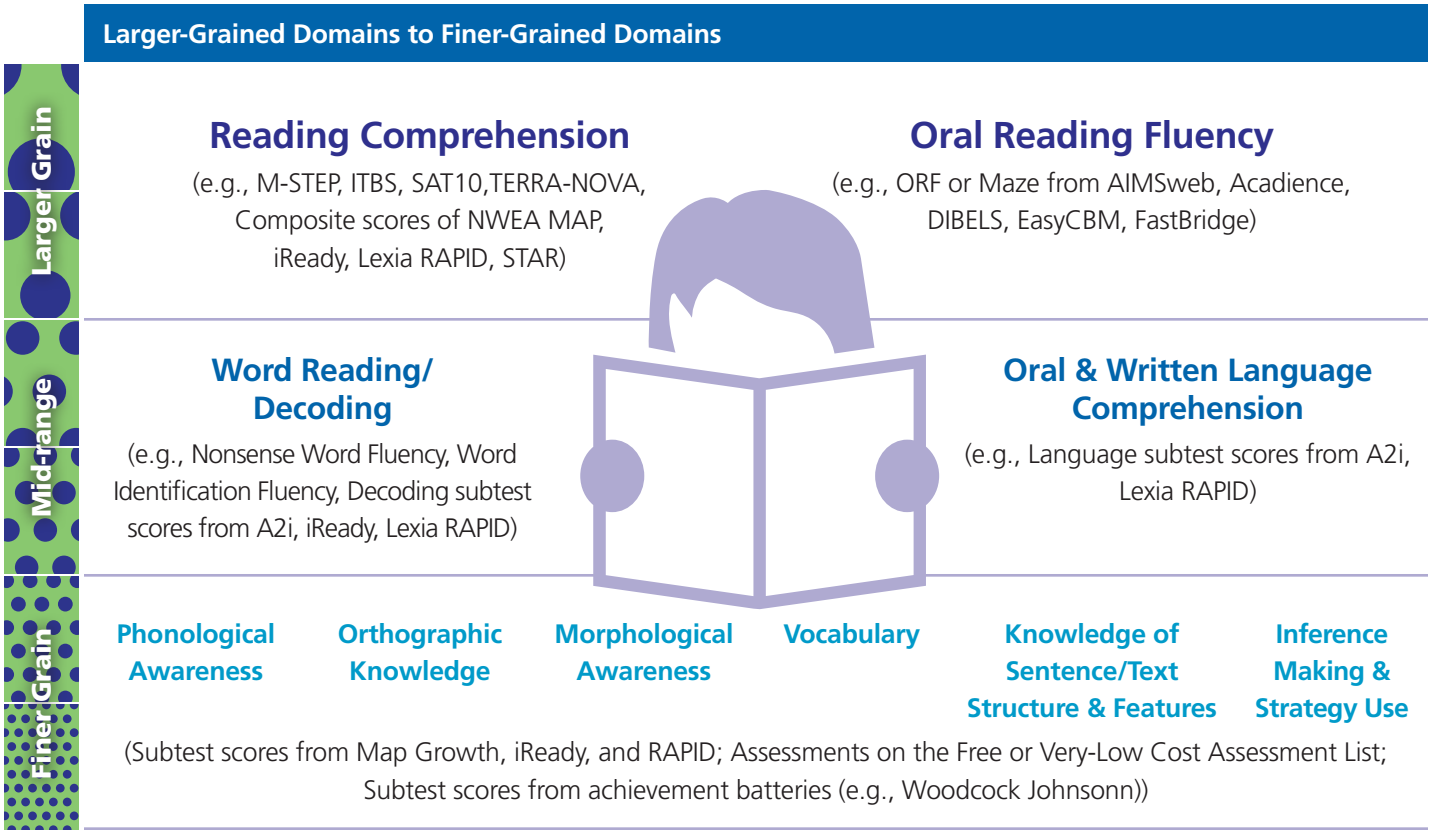
Content

When designing an assessment system, users need a depth of knowledge about the development of literacy and which components of literacy need to be measured at specific times in order to maximize the impact of instruction. Reliable and valid assessment of all components of literacy is not feasible due to time and resource constraints. Therefore, assessments must reflect a small sample of the target literacy domain. As a result, the interpretation of why students perform the way they do on an assessment can be dangerous, either by leading the teachers to concentrate on the inevitably limited definition of the domain reflected in the test, or by leading to misattributions based on insufficient information. Therefore, users should understand which content domains an assessment does and does not measure.

Assessment tools must be designed to measure the domains that predict success on later literacy outcomes *and* are malleable (can be changed by instruction occurring in schools). As demonstrated earlier, reading is a complex process, and having a deep

understanding of the components of reading is needed to promote students' learning. The domains of reading included in assessment depend completely on the decisions that will be made based on the assessment. Some decisions require more specific information than do others. For example, when a grade 2 teacher needs to make decisions about grouping students and determining day-to-day instruction for teaching vowel teams, she needs more detailed information about the vowel teams that her students have mastered. This specific information about vowel teams may or may not represent how students are achieving in their overall reading. Therefore, an assessment of a larger grain size that is an indicator of overall reading achievement in grade 2 (for example, oral reading fluency) would be needed to answer that particular question.

In **Figure III.4.2** we demonstrate how each of these domains of reading fit together and list some example measures of those domains. This is not a comprehensive list of constructs that impact reading. Note that the domains in this figure are all domains that (a) can be assessed, (b) have been shown to predict important outcomes in K through grade 3, and (c) are malleable in K through grade 3 (Connor, Spencer, Day, Giuliani, Ingebrand, McLean, & Morrison, 2014; Foorman, Herrera, Petscher, Mitchell, & Truckenmiller, 2015; Foorman, Petscher, Stanley, & Truckenmiller, 2017).



● **FIGURE III.4.2**

Example content & measures for the decisions described in Table III.4.1

Note: This graphic represents only a partial list of all constructs that impact reading. The assessment tools listed are examples; they do not represent the full range of options districts have available.

In **Table III.4.2,** we demonstrate how each specific reading domain content is aligned with specific decisions/questions and provide example assessments of those domains.

■ **TABLE III.4.2**

How different grain sizes of reading domain information are needed to meet different purposes

Reading domains (larger to smaller grain sizes)	Decision/questions	Example assessments
General reading achievement	Question: Were students supported enough to achieve expectations? Decision: Where to devote more school resources.	M-STEP (or standards-based assessment) For grades K-2: ITBS, TERRA-NOVA, SAT10 Each example test is a standardized, nationally normed test of reading achievement with internal reliability > .90
General reading achievement	Question: Which students do and do not need additional support to meet end-of-year expectations? Decision: To whom to provide Tier 2 instruction	The composite score of some computer adaptive screening assessments are standardized, nationally normed assessments that have internal reliability > .80 and predict one of the assessments listed in the row above > .60. They also have slope reliability > .40 for measuring growth across 3 times per year or monthly. Examples include NWEA MAP, iReady, Lexia RAPID, STAR The fluency rate of some Curriculum-Based Measurement screening assessments in standardized, nationally normed assessments that have parallel form reliability > .80 and predict one of the assessments listed in the row above > .60 and most have slope reliability > .40 for measuring growth weekly. Examples include AIMSweb, DIBELS Next, EasyCBM, FastBridge

Reading domains (larger to smaller grain sizes)	Decision/questions	Example assessments
Decoding and language comprehension	Question: In which main area do students need supplemental instructional time? Decision: selecting Tier 2 interventions for groups of students.	Many computer adaptive assessments measure decoding and language comprehension. A2i, iReady & Lexia RAPID provide subtest scores for decoding and language comprehension. Curriculum-Based Measurement assessment systems measure decoding and need supplemental assessment to determine language comprehension.
Phonological awareness, orthographic knowledge, fluency, vocabulary, sentence structure, text structure, comprehension	Question: Why is a student struggling with reading? Decision: selecting Tier 3 intervention or individualized education plan (IEP) goals for individual students.	The subtest scores on computer-adaptive assessments like MAP Growth, iReady, and RAPID provide information about several, but not all of the domains. Assessments on the Free or Very-Low Cost Assessment list Subtest scores from various academic achievement batteries (e.g., Clinical Evaluation of Language Fundamentals, Woodcock Johnson Test of Achievement)
Each of the reading domain areas listed in the section above	Question: Where are the specific opportunities for learning progress day to day for individuals? Decision: content to re-teach and provide more practice; grouping students for instruction	Quizzes, unit tests, curriculum-embedded assessment, spelling inventories, informal reading inventories, assessments on the Free or Very-Low Cost Assessment list

Tools/Resources for PHASE II, Principle #4:

Human resource recommendation

The science on literacy development is vast and rapidly expanding. Districts need someone in their district or consulting with their district (e.g., ISD) who has time devoted to continuing education specifically in the area of reading, and/or writing.

Formative Assessment for Michigan Educators (FAME)

FAME is a professional learning initiative sponsored by the Michigan Department of Education (MDE) that promotes teacher collaboration and planning for effective formative assessment practice. A cadre of Michigan educators serves as coaches for site-based learning teams of teachers and administrators in Michigan schools.

Learn more at www.FAMEMichigan.org.

National Center on Intensive Intervention (NCII)

The NCII provides an independent evaluation of the reliability, validity, and fairness (i.e., bias) for many commercial screening (initial) and progress monitoring assessment tools. Their six Tools Charts assist educators and families in becoming informed consumers who can select academic and behavioral assessment tools and interventions that meet standards for technical rigor and address their specific needs.

Learn more and explore the resources at https://intensiveintervention.org.

The Standards for Educational and Psychological Testing (AERA/APA/NCME)

This complete set of professional standards for assessment should be met in the design, development, implementation, use, reporting, and analyses of assessments used for all purposes. They are a product of the American Educational Research Association, the American Psychological Association. and the National Council on Measurement in Education. They have been published collaboratively since 1966 and represent the gold standard in guidance on testing in the United States and in many other countries.

Available for purchase online at https://www.apa.org/science/programs/testing/standards.

Understanding Screening: What Do the Technical Standards Mean? (NCII, 2019)

The National Center for Intensive Intervention (NCII offers five one-page documents that provide a brief overview of each standard (validity, reliability, classification accuracy, statistical bias, and sample representativeness) used on the NCII Screening Tools Charts. The one-pagers include a definition, examples, and information on why each particular standard is important for understanding the quality of screening tools.

Available at https://intensiveintervention.org/resource/screening-standards-overviews.

Using Student Achievement Data to Support Instructional Decision Making (IES Practice Guide/What Works Clearinghouse, 2009)

This resource is designed to help schools understand the role of assessment in instructional improvement.

Available at https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/dddm_pg_092909.pdf.

Find all Tools and Resources at **www.MichiganAssessmentConsortium.org/ELAS.**

Notes

Formative Assessment Process: Assessment *for* Learning

The Michigan Department of Education has noted the importance of the formative assessment process in teaching and learning and has adopted the following definition developed by the Council of Chief State School Officers (CCSSO).

> ***"Formative assessment is a planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary learning outcomes and support students to become more self-directed learners."***
>
> (CCSSO FAST SCASS, 2017)

Effective use of the formative assessment process requires students and teachers to integrate and embed the following practices in a collaborative and respectful classroom environment:

- Clarifying learning goals and success criteria within a broader progression of learning;
- Eliciting and analyzing evidence of student thinking;
- Engaging students in self-assessment and peer feedback;
- Providing actionable feedback to students; and
- Using evidence and feedback to move learning forward by adjusting learning strategies, goals or next instructional steps.

Table III.4.3 shows Sadler's three questions as well as the components and elements of formative assessment used in Michigan's Formative Assessment for Michigan Educators (FAME) professional learning program which helps educators learn about, learn to use, and reflect and improve their use of the formative assessment process (Sadler, 1989).

> ***The formative assessment process, often referred to as assessment for learning, is "…embedded in the ongoing flow of activity and interactions in the classroom"***
>
> (Heritage, 2019)

■ **TABLE III.4.3**

Michigan Formative Assessment for Michigan Educators (FAME) Components and Elements

Guiding Questions	FAME Components and Elements
Where are we (teacher and students) going?	**Planning** 1.1—Instructional Planning: planning based on knowledge of the content, standards, pedagogy, formative assessment process, and students. **Learning Target Use** 2.1—Designing Learning Targets: the use and communication of daily instructional aims with the students 2.2—Learning Progressions: connection of the learning target to past and future learning 2.3—Models of Proficient Achievement: examples of successful work for students to use as a guide.
What does the student understand now?	**Eliciting Evidence of Student Understanding** 3.1—Activating Prior Knowledge: the opportunity for students to self-assess or connect new ideas to their prior knowledge 3.2—Gathering Evidence of Student Understanding: use of a variety of tools and strategies to gather information about student thinking and understanding regarding the learning targets from *all* students 3.3—Teacher Questioning Strategies: the intentional use of questions for students to explain their thinking or to connect their idea to another student's response 3.4—Skillful Use of Questions: a focus on the purpose, timing, and audience for questions to deliver content and to check students' understanding
How do we (teacher and students) get to the learning target?	**Formative Feedback** 4.1—Feedback from the Teacher: verbal or written feedback to a student to improve his or her achievement of the learning target 4.2—Feedback from Peers: feedback from one student to another student about his or her learning in relation to a learning target 4.3—Student Self-Assessment: the process in which students gather information and reflect on their own learning in relation to the learning goal. **Instructional and Learning Decisions** 5.1—Adjustments to Teaching: teachers' daily decisions about changes to instruction 5.2—Adjustments to Learning: students' use of feedback for improvement.

Attachments

Attachments A and B illustrate the application of the formative assessment process by the teacher with the students in the second-grade classroom depicted in the **Portraits.**

Attachment A is the planning template that the teacher completed before teaching the lesson. It provides information on how the teacher planned the lesson, when the formative assessment process elements would be applied, and how the teacher planned to collect information on student understanding during the lesson so as to move instruction and student learning forward.

Attachment B shows how the formative assessment process was implemented in the lesson. It indicates when both the FAME components and elements and the *Essential Instructional Practices in Early Literacy: Grades K to 3* (MAISA/GELN/ELTF, 2016) were used during the lesson illustrated in the vignette.

Attachment A: Formative Assessment Planning Template

Feedback Planning

DATE

What am I teaching? [State Standard(s)

RL.2.3. Describe how characters in a story respond to major events and challenges.
SL.2.1b. Build on others' talk in conversations by linking their comments to the remarks of others.
SL.2.1c. Ask for clarification and further explanation as needed about the topics and texts under discussion.

How can I make this clear to students? [Student-Friendly Learning Target(s)
RL.2.3
Use evidence from the text to prove what I know about my character.

Provide a brief description of how students know that they've met the learning targets.

Using evidence from the text, students will list on three sticky notes what they already know about their character. The first sticky note will be labeled Always (3 or more items), the second Sometimes 2 or more items) and the third OMG (1-2 items). I will model this for students

How will I know if they understand the learning target? (Mode of Assessment & Student Evidence)

☒Product
☒Conference
☒Observation
(*Check all that apply.)*

What strategies will be used to gather evidence of student understanding?

I will use self- assessment and goal setting through the use of conferring and student reading bookmarks. I'll use activating prior knowledge through strategic questioning and student turn and talks.

How will I teach students? (Instruction)

I will start with activating prior knowledge of common text. I'll model the new learning target with lots of student input.

What curricular resources will I need?

Common text for whole class model; sticky notes for my model to display on doc camera; reading goal bookmarks; book club books

How will they practice before the assessment?

During my whole class model, students will turn and talk with a partner and add ideas to our sticky notes. They will also check in with their book club partners and share two things they all know about their character that will go on their own sticky notes

How much time should I plan for instruction and practice?

Whole class with embedded practice: 15 min
Individual work time: 20 minutes
Small group book clubs: 15 minutes

Attachment A *(side 2)*

Feedback Planning

How will I involve my students in the process of assessment? (Formative Strategy)

☒ Self-Assessment ☒ Activate Prior Knowledge ☒ Goal Setting ☐ Peer Assessment

What tool(s) will I use?

Student book marks, sticky notes, observation

What feedback will I give as students are learning and being assessed?	**When will students have the opportunity to use the feedback?**
☒ Verbal ☐ Written	They will use the feedback right after the conferring time. Also, they can use feedback from their book club peers right in the moment.

Possible Misconceptions:

Students might describe their character's physical appearance rather than their actions.
Students might summarize the whole story instead of focusing on specific character actions.

How might I begin thinking about instructional revisions?

Idea #1	Idea #2	Idea #3
After my first whole group demonstration, I will invite "confused" students to stay and work with me until they are ready to work independently.	I will point out and model in my demonstration model that it is about focusing on specific character actions. Then, during individual and small group time, I'll invite students with correct models to share their work and thinking with students needing more assistance.	I'll use the bookmark tool at the conclusion of the lesson along with the sticky note to gather evidence of student understanding. Then, I'll use that to inform and adjust my teaching.

Attachment B: FAME Formative Assessment Process Applied in the Grade 2 Portrait

What follows is a sample vignette showing the formative assessment process in a second-grade classroom. The left column addresses the Formative Assessment for Michigan Educators (FAME) Components and Elements of the lesson, and the right column addresses the relevant "essential instructional practice" developed by the Michigan Association of Intermediate School Administrators (MAISA) General Education Leadership Network (GELN) Early Literacy Task Force (ELTF). Michigan K-3 educators are charged with using these *Essential Instructional Practices in Early Literacy: Grades K to 3* (MAISA/GELN/ELTF, 2016) and are supported in their use by a program of professional learning.

In the vignette, the teacher engages in instruction that aligns with the formative assessment process as well as the *Essential Instructional Practices in Early Literacy: Grades K to 3* (MAISA/GELN/ELTF, 2016). In particular, during this lesson, the teacher engages in ongoing assessment and observation of children's literacy development that informs their education (Essential 9). The teacher is attentive to goal setting and other approaches to foster children's literacy motivation and engagement (Essential 1). In addition, during this lesson, the teacher engages students in a read-aloud (Essential 2), and the teacher provides small-group and individual literacy instruction (Essential 3). It is also clear that there are abundant reading opportunities for children in the classroom (Essential 8).

KEY
E= Essential
B= bullet list item

Grade 2 Formative Assessment Process Vignette

Fame Components & Elements	Narrative	Literacy Essentials Practices
	It is mid-January and the second-grade team in Mr. Ahmed's school is teaching a reading unit that makes use of book clubs.	
1.1 3.2 4.1	**Planning** Along with the posted learning target from the lesson, Mr. Ahmed also considers the foundational reading skills his second-grade students are acquiring and how he can support these on a minute-to-minute instructional basis. While these skills may not live in the posted learning target, Mr. Ahmed is constantly observing and **eliciting evidence** of these skills in his data binder and in the students' reading-goal bookmarks. Additionally, Mr. Ahmed offers in-the-minute actionable **feedback** for his students in the teaching and learning cycle	E3; B2 E9; B4

<table>
<tr><th>Fame Components & Elements</th><th>Narrative</th><th>Literacy Essentials Practices</th></tr>
<tr><td>1.1</td><td>As Mr. Ahmed plans his upcoming lesson and considers his students' needs, he makes decisions for both his direct instruction and small-group book clubs. The main comprehension focus in this lesson is for all students to use their growing knowledge of how characters act and how these actions influence the plot of the story. A common text has served as the model for his direct instruction time.
This lesson has three main segments:
• Whole group instruction with a common class text
• Independent reading and work time using book club books matched to students' reading skill and interest
• Small-group time with book club peers</td><td></td></tr>
<tr><td>1.1

3.1
3.2
3.3
3.4</td><td>Whole Group Instruction: The students are gathered and are seated close to their book club group members. Each student has their book club text and a pencil.
Using the whole group common text, visible to all students, Mr. Ahmed activates prior knowledge by reviewing what students already know about the main character. This allows him to briefly revisit and assess former learning targets. Following his read-aloud of the text, Mr. Ahmed uses questioning strategies to encourage students to explain their thinking and to reinforce student-self directedness. As Mr. Ahmed listens in on partner conversations, he is able to gather evidence of students' understanding of the previous learning progressions.</td><td>E2; B1</td></tr>
<tr><td>2.1
2.2</td><td>Learning Progressions
<table>
<tr><th>Building Block</th><th>Learning Target</th><th>Success Criteria</th></tr>
<tr><td>Last Week
Readers think about how a series flows; seeing patterns and predicting what will happen.</td><td>By reading and studying patterns, I can explain how these books fit together in a series.</td><td>With my book club, I can share at least 3 ideas from my jot notes to help explain how these books are similar.</td></tr>
<tr><td>Today's Lesson
Readers expand their ideas and understanding of their main character in a series.</td><td>Use evidence from the text to prove what I know about my character. Then, share and learn more about this with my book club group.</td><td>I can use sticky notes labeled
"Always," "Sometimes," and "Oh my goodness! (OMG)" to show my understanding of my character
3 or more items for Always
2 or more items for Sometimes
1 or more item for OMG</td></tr>
</table></td><td></td></tr>
</table>

Fame Components & Elements	Narrative	Literacy Essentials Practices
3.3 3.4	"What are three things you know about the main character, and what is your evidence from our text?" Mr. Ahmed listens in to partner responses and then shares a few themes with the whole group. "Sara and Cassie realized…" "Emma and Sam thought about…" "A question I heard a few of you asking…"	E9; B1 E2; B4
2.1	Mr. Ahmed then introduces today's learning target. "Today, in your individual reading and then later in your book clubs, the focus will be on what you already know about your characters, and on showing your evidence from the text for that knowing." The target is posted on the screen. Mr. Ahmed reads the target out loud to the students. "Target: Use evidence from the text to prove what I know about my character. Then, share and learn more about this with my book club group. Success Criteria: I can use sticky notes labeled "Always," "Sometimes," and "Oh my goodness! (OMG)" to show my understanding of my character 3 or more items for Always 2 or more items for Sometimes 1 or more item for OMG	E1; B5

Fame Components & Elements	Narrative	Literacy Essentials Practices
2.3 2.1 3.3 4.1 4.2	Mr. Ahmed uses the class common text to model a "think-aloud" of what this looks like. He ensures all students can see and read his sticky notes by placing them on the document camera. Included in his think-aloud is the "why": "Why is it important for readers to know about characters?" Mr. Ahmed also reinforces what **proficient achievement** looks like by listing three items on the Always sticky note, two items on the Sometimes sticky note, and one item on the OMG sticky note. To engage participation and practice during this model, he has students turn and talk about items that might go on the sticky notes. He uses some of their ideas for his own models. "Please think to yourself about your own character. What do you already know that you want to add to the Always sticky note?" 30-second pause. "Now, please turn to your book club friends and each share just one item you'll add to your Always sticky note." Mr. Ahmed again shares the whole group target and checks for clarity. "Please turn and talk to your partner about what you understand about the target and also what questions you or your partner might have about the target." Mr. Ahmed listens in to the student talk and jots a few notes to address with the whole class. He then briefly offers **feedback** to clarify the target. Mr. Ahmed also takes a few notes about which students he'll want to check in with first, based on their confusion/understanding. Example: "Emma and her partner want to review what 'evidence from the text' means, while a few other partnerships are curious about what they will do with their three sticky notes."	E2; B2 E2; B5
5.1 2.1 4.2	Mr. Ahmed **adjusts his teaching** to provide support about the sticky notes. With the whole class, he reviews the success criteria regarding how the sticky notes will be composed and organized while addressing the needs of students needing a bit more support. Again, **communication** and interaction with the **learning target** continues. "Please check in with your book club group and answer this question: 'How will we know we have met the learning target?'"	

<table>
<tr><th>Fame Components & Elements</th><th>Narrative</th><th>Literacy Essentials Practices</th></tr>
<tr><td>3.2
4.3</td><td>"As you add today's target to your bookmark, I'll check in with each group."

The students then take their reading-goal bookmarks out of their book club text and add today's learning target to their book club goals as Mr. Ahmed visits each group. These bookmarks help students to self-assess while providing evidence of their understanding. (Mr. Ahmed differentiates his assistance by pre-filling some elements of the bookmark for specific students.)

Ayesha's Reading-Goal Bookmark

<table><tr><th>Date</th><th>My Reading Goal</th><th>Self-Assessment Reflection</th><th>Book Club Target</th><th>Self-Assessment Reflection</th></tr><tr><td>1-15-19</td><td>Notice linking words and add them to my word list</td><td>Copied the words also and together and used them in my story</td><td>Use evidence from the text to prove what I know about my character. Then, share and learn more about this with my book club group</td><td></td></tr></table></td><td>E3; B4</td></tr>
<tr><td>5.1
3.2</td><td>Mr. Ahmed continues to adjust his teaching by including additional support and gathering evidence of what students already understand. "For those of you wanting to review what 'evidence from the text' is all about, please remain here for a few minutes." He directs a student to get the group started. "Ayesha, will you please record on this chart what this group already knows about using evidence from the text? I'll check back with you in a few minutes." Once the rest of the class has begun their reading, Mr. Ahmed returns to work with this group.</td><td>E3; B4</td></tr>
</table>

Fame Components & Elements	Narrative	Literacy Essentials Practices
3.2 4.1 5.2	**Individual Learning Time** Students read for fifteen minutes and then work on the learning target as they jot on their sticky notes. Students are grouped near their book clubs during this time. Mr. Ahmed confers with students on both book club and individual reading goals. He names what he notices the students doing, asks questions, and gives actionable **feedback.** He ensures students use the feedback to **adjust their own learning**. He also encourages collaboration amongst students: • How did you know to do that? • Look, you've used a word-wall word. Where might you look to make sure it's spelled correctly? • Oh, please check in with Brian. He had the same question. • So, next time, you can try… • How will you know you've…?	E1; B2 E1; B3 E2; B4 E3; B2 E9; B2
4.2 4.1	**Small-Group Book Clubs** Mr. Ahmed invites students to meet with book clubs and share what they are learning. The sticky notes are used to help focus their conversations. Students know they are to "read their evidence from the text" out loud during their book club time. This helps to practice reading fluency. In previous lessons, students have learned how to have substantive conversations and offer **peer feedback.** Sentence and question stems and samples are posted in all the book club meeting areas. • How did you figure…? • Thank you for sharing… • Could you please say more? • As you think about today's target… • Here is another idea... Mr. Ahmed visits the small groups, listening in and offering instruction and feedback as needed.	E1; B3 E3, B2 E3; B3 E3; B4 E9; B2
1.1	During the initial planning for this unit, Mr. Ahmed organized the small-group book clubs based on students' interest and instructional needs. Malcolm's group of four includes more advanced readers. Each student is reading a different book from the same, advanced series. Emma's three group members have copies of the same book. It is from the same series as the common class text. The students in this group have a specific goal of noticing and recording linking words. Cassie's three group members have copies of the same book. It is also from the same series as the common class text. Two of the group members are Spanish speakers.	E1; B1 E1; B2 E8; B2

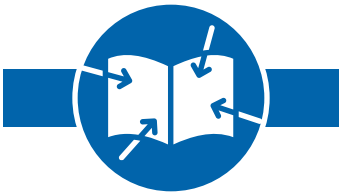
<table>
<tr><th>Fame Components & Elements</th><th>Narrative</th><th>Literacy Essentials Practices</th></tr>
<tr><td>3.2
4.3
4.2</td><td>Mr. Ahmed concludes this lesson by having the students stand in an inside-outside circle and, with a partner, share their answers to these three questions.
1. What do I know now about today's learning target?
2. What question do I still have about the learning target?
3. What feedback can you offer your partner?
Again, this serves as a time for the teacher to gather evidence of student understanding while allowing the students to self-assess their learning and offer peer feedback.</td><td>E1; B3
E9; B4</td></tr>
<tr><td>3.2</td><td>Mr. Ahmed collects the bookmarks from the students. Because he has been listening in and conferring throughout the independent and small-group time, he has offered feedback to many students and already has solid knowledge of what students know and what may be confusing them. He will continue to use the evidenced gathered on the bookmarks to record evidence of understanding.</td><td>E9; B1</td></tr>
<tr><td></td><td>Emma's Reading-Goal Bookmark
<table>
<tr><th>Date</th><th>My Reading Goal</th><th>Self-Assessment Reflection</th><th>Book Club Target</th><th>Self-Assessment Reflection</th></tr>
<tr><td>1-15-19</td><td>Notice linking words and add them to my word list</td><td>Copied the words also and together and used them in my story</td><td>Use evidence from the text to prove what I know about my character. Then, share and learn more about this with my book club group.</td><td>I know that Clara was sad, and I read page 5 where she sits on the ground and cries. I used all my stickies.</td></tr>
</table></td><td></td></tr>
<tr><td>5.1
1.1</td><td>As Mr. Ahmed plans for tomorrow's lesson, the bookmarks will be used as a tool to adjust his teaching decisions for tomorrow.
In this daily, minute-to-minute formative assessment process, Mr. Ahmed is continually making changes to instruction in order to support his students' needs.</td><td></td></tr>
</table>

Notes

SECTION III-5

PROFESSIONAL LEARNING PROGRAMS: Features that support stakeholder groups in implementing and using an ELAS

This chapter includes the research and science that supports Principle #5 and related recommendations. It also offers a sampling of resources that schools and districts might find helpful as they support those who will be implementing and using the early literacy assessment system (ELAS), including district administrators, principals, teachers, policymakers, and students and their families. The content provides some of the relevant explanation and backing for ***Principle #5*** *and associated* ***Phase III Supporting and Monitoring Recommendations.***



Phase III RECOMMENDATIONS (Principle #5)
Principle #5: The ELAS must be supported and monitored by a sustained program of collaborative, inquiry-based PROFESSIONAL LEARNING and FEEDBACK.
3.1: The **ELAS LEADERSHIP TEAM** should use the logic model and theory of action to develop plans for professional learning and formative evaluation of the ELAS.
To accomplish Recommendation 3.1, the **ELAS LEADERSHIP TEAM,** in collaboration with **PRINCIPALS AND TEACHERS,** should:
3.2: Gather information about the current level of knowledge and capacity related to literacy, assessment, and professional learning (strengths and gaps) among staff (teachers, administrators, coaches), students and their families, and local policymakers, and use these data to guide the implementation and support of an ELAS.
3.3: Create a cohesive master professional learning plan (aligned to Michigan's *Professional Learning Policy* and associated *Standards for Professional Learning)* to support all stakeholders responsible for early literacy development and assessment. The plan should address early literacy development and assessment and meet the learning needs of children and instructional needs of teachers based on evidence of need as well as research.
3.4: Budget for and plan to provide substantive resources and support for content-focused professional learning about early literacy development and assessment that is collaborative, intensive, sustained, and job-embedded.
3.5: Participate in statewide efforts to prepare, support, and generate teacher leaders and instructional coaches to promote effective early literacy development and assessment practices, with an emphasis on the use of classroom formative assessment practices.
3.6: Develop a plan for formative evaluation of the ELAS that includes ongoing monitoring and feedback from the field about the quality, utility, and effectiveness of the assessment system as it is implemented and becomes operational.

Introduction

A primary and powerful lever for bolstering educators' successful implementation of the recommended early literacy assessment system (ELAS) is a sustained program of collaborative, inquiry-based professional learning that is adequately supported and monitored. Collaborative inquiry provides educators with the necessary structure and processes to refine and adapt their professional knowledge and practices to effectively use assessment information to inform decisions about student literacy needs and to achieve measurable student results (Colton, Langer, & Goff, 2015; Jensen Sonnemann, Roberts-Hull & Hunter, 2016; Timperley, & Halbert, 2014). Engagement in inquiry builds educators' capacity to diagnose, adapt, and solve daily challenges they face in their work. When such professional learning is planned, implemented, and evaluated effectively, it also is an essential strategy for advancing equity. Educators engaged in inquiry not only deepen their content knowledge and pedagogy, but also increase their understanding of students' culture, language, and background—and their impact on assessment—and how to use assessment information to guide their future actions.

Educators, however, are not the only stakeholder group who could benefit from a thoughtful approach to professional learning. Students and their families also play an active role in assessment and can benefit from the information (data) that derives from assessment. Policymakers at the local, regional, and state levels also influence assessment policies and resource allocation, and they use assessment data to inform their decisions. Consequently, it's important to include them in any review of the district's current knowledge and capacity regarding assessment tools and practices and the appropriate use of assessment data.

This review of the district's human capacity regarding literacy development and assessment tools and practices is not meant to be exhaustive, nor should it resemble either an evaluation or a simple checklist. Rather it is about developing shared understanding about where the district has assets and where growth will be needed in order to accomplish the goal of implementing and supporting an effective ELAS.

District leaders need to know where various groups of people are starting on the ELAS journey. Through surveys, anecdotes, and dialogue, they can discover what foundational knowledge, skills, and dispositions the learning community brings to this effort and where it will need additional guidance.

Six phases of collaborative inquiry

The collaborative inquiry cycle is a systematic and recursive process for educators, as learners, to explore issues or wonderings about their practice and the literacy learning of those they teach or lead (principle/teacher, teacher/student, etc.). The process enables learners to determine evidence-based resolutions through dialogue, analysis of assessment, new learning, experimentation and reflection. Their inquiry is driven by the system's vision of assessment and literacy practice. The inquiry process aligns with assessment literacies—the knowledge, skills, and dispositions needed by educators to effectively use assessment tools and practices and create assessment systems that support their students' literacy development.

This continuous improvement approach to professional learning meets educators' learning needs while simultaneously cultivating a culture of collective responsibility for student success. The continuous application of collaborative inquiry cycles aligns educators' learning with student needs and expected literacy learning outcomes and standards.

Collaborative inquiry consists of six phases, each of which informs the next phase or raises questions that require going back to an earlier phase.

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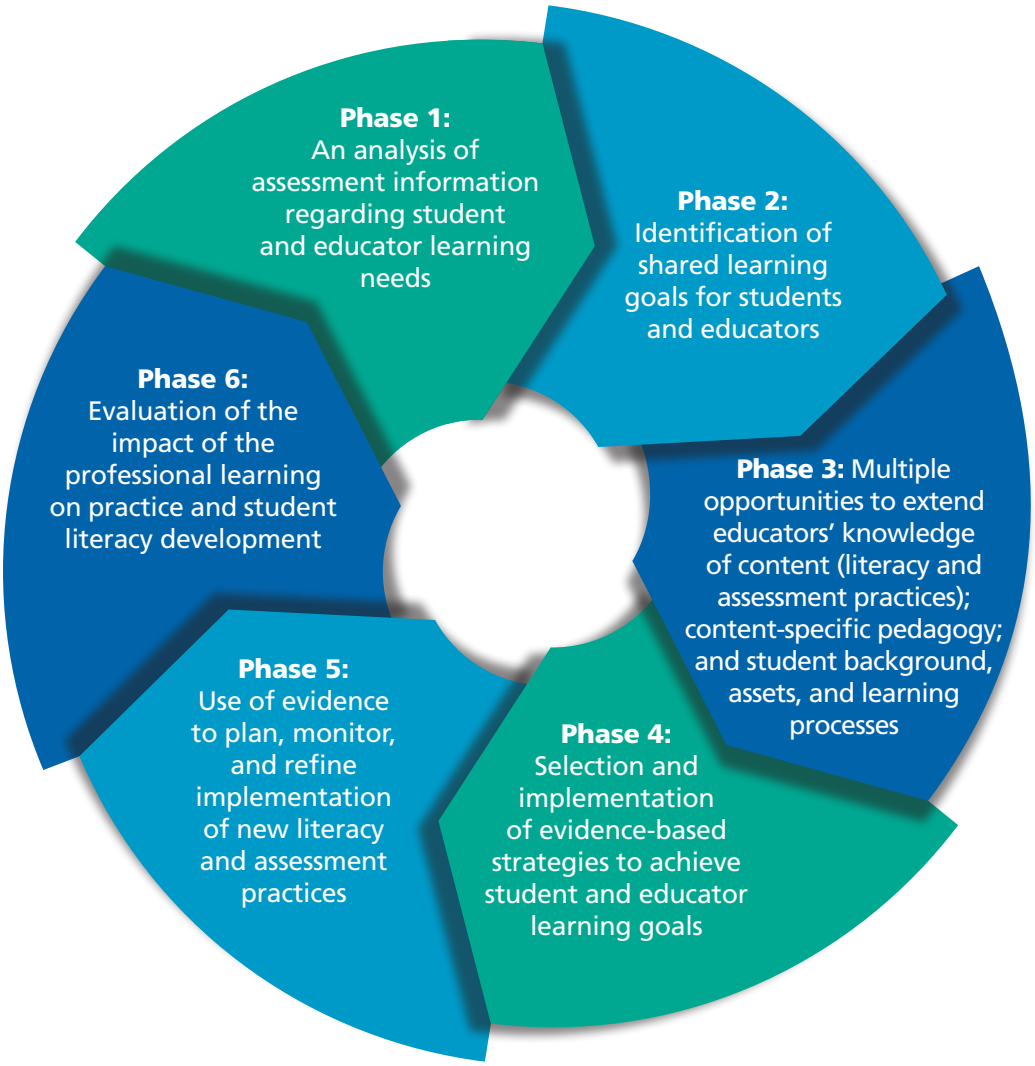


● **FIGURE III.5.1**
Collaborative inquiry consists of six phases.

Six driving assumptions of collaborative inquiry

Collaborative inquiry as a powerful approach to professional learning for addressing early literacy development and assessment rests on **six driving assumptions:**

1. Professional learning is an active process.
2. Professional learning allows for educator agency.
3. Professional learning is relevant and content specific.
4. Professional learning is best situated in cultures of collaboration.
5. Professional learning is sustained.
6. Professional learning requires organizational systems and structures of support.

Each assumption is described in detail in the following text.

An online learning module from the Michigan Assessment Consortium (MAC) entitled "Collaborative Inquiry" provides an overview of the collaborative inquiry process and how it ties to the Michigan Assessment Literacy Standards (see *Resources & Tools* at the end of this chapter).

Assumption 1: Professional learning is an active process

Learning is the process through which experience causes a permanent change in knowledge and behavior (Woolfolk, Winne, & Perry, 2012). *"Learning is constructed through a process of engagement, analysis and reflection…"* (Killion, 2019, p. 5). *"For lasting changes in behavior to occur, beliefs and assumptions must be brought to consciousness and the deep structures supporting behaviors must be addressed"* (Guerra & Nelson, 2009). Such transformative learning only happens when individuals experience dissonance between the beliefs they hold and what they are experiencing (Mezirow, 1995). Transformative learning is particularly critical in contexts where educators are supporting literacy learning of students whose cultural backgrounds, language, or gender identity are different from those of the educators. Since this kind of dissonance rarely occurs in the normal course of an educator's day, educators need to engage in learning designs that intentionally interrupt their current ways of viewing their practice and student learning. Collaborative inquiry is such an intervention.

"Transformative learning is particularly critical in contexts where educators are supporting literacy learning of students whose cultural backgrounds, language, or gender identity are different from those of the educators. Since this kind of dissonance rarely occurs in the normal course of an educator's day, educators need to engage in learning designs that intentionally interrupt their current ways of viewing their practice and student learning. Collaborative inquiry is such an intervention."

Collaborative inquiry integrates multiple active learning designs that assist the adult learner in *"moving beyond comprehension of the surface features of a new idea or [literacy or assessment] practice to developing a more complete understanding of its purposes, critical attributes, meaning, and connection to other approaches"* (Learning Forward, 2011). Darling-Hammond, Hyler, & Gardner (2017, p. 7) consider active learning an *"umbrella element that often incorporates the elements of collaboration, coaching, feedback, and reflection, and the use of models and modeling."* Providing time for practice is also key to the implementation of new practices.

Assumption 2: Professional learning allows for educator agency

Agency, or ownership, enables educators to drive the focus of their learning, the ways in which learning occurs, and how they evaluate the impact of their learning (Learning Forward, 2011). Agency requires clarity of purpose about expectations and a method for measuring progress toward those expectations. This is why it is important to monitor and assess the success of teachers and administrators in acquiring and applying literacy assessment practices. Agency empowers and intrinsically motivates educators to pursue continuous improvement and support colleagues. Educators are in the driver's seat when engaged in collaborative inquiry around literacy and assessment knowledge and practice.

Assumption 3: Professional learning is relevant and content-specific

When educators engage in professional learning that is guided by specific student learning needs, is content-specific, and involves cycles of inquiry into educators' problems of practice, substantial positive influences on teachers' practice and student achievement result. (Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, Porter, Desimone, Birman & Yoon, 2001; Jensen et al., 2016; Yoon, Duncan, Lee, Scarloss & Shapley, 2007). The most effective professional learning for educators occurs when the focus is on the concrete, everyday challenges involved in the teaching and learning of *specific* curriculum content (e.g., literacy development, pedagogy, and assessment literacy). This makes the learning relevant to the learner. Halbert & Kaser (2016) write *"rather than relying on generalized solutions, [inquiry] places contextual evidence*

and analysis at the center of focused change efforts" (p. 11). Scanlon, Gelzheiser, Vellutino, Schatschneider, & Sweeny, (2008) found that teachers who received professional learning focused on specific literacy content, tools, and instructional strategies significantly increased their effectiveness and improved performance levels of students' literacy. This approach to professional learning is in stark contrast to a focus on general principles of teaching or generic teaching practices that are taken out of context (Aspen Institute, 2018; Darling-Hammond & McLaughlin, 1995; Darling-Hammond et al., 2017; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Learning Forward, 2019). Timperley et al., (2014) describes the centrality of collaborative inquiry in the lives of educators:

> *"Motivation and energy build, as educators together find compelling reasons to change what they are doing, and as they take joint responsibility for doing so. As they engage in deeper forms of inquiry, the process becomes central to their professional lives. They will not, in fact they cannot, go back to earlier, unquestioning ways of doing things" (p. 6).*

Assumption 4: Professional learning is best situated in cultures of collaboration

According to DuFour & Matton (2013) and Darling-Hammond et.al. (2009), *"the most productive environments seem to be those in which [educators] regularly interact and engage in positive and productive collegial conversations around meaningful and relevant issues* (as cited in Colton et al., 2015, p. 49). Love, Stiles, Mundry, & DiRanna, (2008) add that *"dialogue is a central process of the [inquiry cycle] because it invites multiple interpretations, helps teachers examine limiting assumptions, and unleashes teachers' creativity and expertise"* (as cited in Colton et al., 2015). Effective communication becomes possible through intentional facilitation. Collaboration, however, does not happen automatically. It involves developing working agreements and communication skills. Teacher leaders often serve in this role. They ensure that working agreements are followed and that teachers develop the communication and analytical skills they need to stay focused while studying their practice and student learning.

As educators work together to solve problems of practice around literacy, they draw on the diverse understanding and expertise of group members and others within and outside of the district. Collaborative learning holds everyone accountable and builds collective responsibility for the literacy success of every student and educator within and across schools. This is especially possible when leaders learn side by side with their staff. The distribution of knowledge and skills also results in collective efficacy. Collective efficacy is defined as *"shared belief in [the group's] conjoint capabilities to organize and execute courses of action required to produce given levels of attainment"* (Bandura, 1977). Rachel Eells' (2011) meta-analysis of studies related to collective efficacy and achievement in education demonstrate that the beliefs teachers hold about the ability of the school as a whole are positively associated with student achievement across subject areas. On the basis of Eells' research, John Hattie (2016) positioned collective efficacy at the top of the list of factors that influence student achievement.

"As educators work together to solve problems of practice around literacy, they draw on the diverse understanding and expertise of group members and others within and outside of the district. Collaborative learning holds everyone accountable and builds collective responsibility for the literacy success of every student and educator within and across schools."

"It could take upwards of 50 hours of intensive professional learning to realize results for students (Learning Forward, 2011). This is why it is important to engage educators in continuous cycles of inquiry."

Assumption 5: Professional learning is sustained

Just as it takes time for students to learn complex curriculum, educators need time to acquire new knowledge, skills, dispositions, and behavior to effectively use assessment tools and practices that support their students' literacy development. Educators need time to learn, practice, be coached, analyze, and reflect on the results; have someone help them to understand the ideas more deeply; and then try it again, repeating as necessary. Research indicates that the intensity and duration of professional learning is related to the degree of teacher change (Desimone et al., 2002). The exact length of time to support teacher and student achievement has not been defined. It could take upwards of 50 hours of intensive professional learning to realize results for students (Learning Forward, 2011). This is why it is important to engage educators in continuous cycles of inquiry. It should be noted that *"the effectiveness and importance of duration is dependent upon the quality, design and focus of the content and activities that comprise the professional learning effort"* (Swayer & Stukey, 2019). Collaborative inquiry provides the necessary structures and processes for sustaining educators' learning around assessment use and literacy development.

Assumption 6: Professional learning requires organizational systems and structures of support

It is impossible to reap the full benefit of collaborative inquiry without organizational systems and structures to support effective professional learning for continuous improvement. Leaders across the school district need to operate as a team to plan, implement, and manage a professional learning system with measures for success. Thus, the team needs to clarify expectations and goals regarding literacy and assessment knowledge, skills and practices and professional learning. In so doing, they communicate that there is an important link between professional and student learning.

Professional learning requires substantive support and resources to achieve its goals as stated in **Recommendation 3.4:** *Budget for and plan to provide substantive resources and support for content-focused professional learning about early literacy development and assessment that is collaborative, intensive, sustained, and job-embedded.*

A district's leadership team needs to increase the staff's capacity to engage collaboratively; provide adequate time for collaborative team learning; and establish ongoing support for implementation of new practice in the classroom (Jensen, 2016; Learning Forward, 2011). A major challenge to collaborative inquiry identified by educators is time. The district's school board needs to adopt policies related to district calendars and school schedules that support collaborative learning during the workday.

The notable change in language from professional development to professional learning used in this Guide is intentional. It represents a shift from learning that is done ***to*** educators, to learning that actually *transforms* how educators think and act. *"By making learning the focus, those who are responsible for professional learning will concentrate their efforts on assuring that learning for educators leads to learning for students"* (Learning Forward, 2011, p. 13).

Joellen Killion's workbook, *Establishing Time for Professional Learning* (2013), *"guides districts and schools as they develop, vet, and implement recommendations for increasing collaborative learning time for educators, and then evaluate the effectiveness of the change"* (p. 10). A second workbook, *Professional Learning Policy Review: A Workbook for States and Districts* (Killion, 2013), provides states and districts with guidance to conduct a review of existing policies related to professional learning. Killion & Hirsh (2012) discuss how districts can analyze their investments in professional learning.

The vision provided of sustained, collaborative inquiry-based professional learning is captured in various forms in the following documents:

- Michigan's definition and standards for professional learning
- The Every Student Succeeds Act (ESSA) definition of professional development
- The *Essential Coaching Practices in Elementary Literacy; Essential School-Wide and Center-Wide Practices in Literacy;* and *Essential Instructional Practices in Early Literacy: Grades K-3* (MAISA/GELN/ELTF, 2016)

Portrait connection

The **Portraits** in Section II of this Guide depict three teachers' intentional and effective application of shared knowledge about literacy assessment, curriculum, and instruction to effectively respond to the unique cultural and linguistic backgrounds, assets, and literacy needs of their students. Although the Portraits don't explicitly describe the professional learning the teachers experienced, it is worthwhile to pause and consider the scenario described in the sidebar below of how the teachers might have developed their literacy and assessment expertise through collaborative inquiry.

A detailed account of Ms. Jones' first-grade team as they engage in each phase of the inquiry cycle to increase their skills in assessing and developing students' reading fluency is provided in the illustrative section **Collaborative Inquiry in Action** that begins on page 121. In that illustration, you'll notice that each phase of the cycle presents a guiding question that drives the continuous learning process. Questions stimulate teachers' curiosity, which is a powerful motivator for learning.

ILLUSTRATIVE SCENARIO OF COLLABORATIVE INQUIRY EXPERIENCES OF PORTRAIT TEACHERS

The district leaders and community members, including families, establish early literacy as an improvement goal, clearly communicate the goal to all district educators and the community, implement essential professional learning conditions, and establish a procedure for monitoring and supporting application of assessment literacy practices. An altered calendar and school schedule are approved by the school board to provide every educator in the district time during the workday to engage in high-quality professional learning.

During the teachers' designated daily planning time they engage in facilitated and systematic cycles of inquiry into the effectiveness of practice for student engagement for literacy learning. Teacher leaders, including instructional coaches build team members' collaborative skills and support individual and team learning and the implementation of new practices in the teachers' classrooms. District leaders support, monitor, and evaluate implementation of professional learning to ensure changes in educator practices.

The primary goals for professional learning are changes in educator practice and increases in student learning. This is a process that occurs over time with substantive support for implementation, so educators consistently embed their new learning into practice. Full and effective implementation of new practices is possible when those responsible for professional learning follow **Recommendation 3.3:** *Create a cohesive master professional learning plan (aligned to Michigan's Professional Learning Policy and associated Standards for Professional Learning) to support all stakeholders responsible for early literacy development and assessment. The plan should address early literacy development and assessment and meet the learning needs of children and instructional needs of teachers based on evidence of need as well as research.*

Conclusion

Professional learning is a strategy that *"is available to almost every educator, and*—when planned and implemented [and evaluated] correctly—*ensures that educators acquire the knowledge and skills necessary to help more students meet standards"* (Hirsh, 2018). Collaborative inquiry enables educators to drive the focus of their learning, the ways in which learning occurs, and how they evaluate the impact of their learning (Learning Forward, 2011). As educators engage in cycles of collaborative inquiry, they develop an inquiry stance—continuously wondering how they can make a difference for their learners' literacy development using assessment and literacy practices.

As described by Anderson (1984), Berliner (1986), and Colton & Sparks-Langer (1993):

> *"Maintaining an inquiry stance allows [educators] to make judgments based on thoughtful analysis, problem solving, experimentation, and assessment. Through the inquiry process, [educators] continually transform their beliefs, improve their analytical thinking skills, and develop a rich and well-organized knowledge base that allows them to think through situations and make difficult decisions in the heat of the moment"* (as cited in Colton et al., 2015, p. 33). Collaborative inquiry provides a professional learning approach with the power and a track record for permanently changing the literacy and assessment practices of teachers and leaders so they can create new solutions to complex problems to support literacy development of all students.

Professional Learning Plans: A Workbook for States, Districts, and Schools (Killion, 2013) provides educators with a step-by-step guide for completing a professional learning plan. The plan should be integrated into the logic model and the formative evaluation of the ELAS as indicated in **Recommendation 3.1:** *The ELAS LEADERSHIP TEAM should use the logic model and theory of action to develop plans for professional learning and formative evaluation of the ELAS.*

COLLABORATIVE INQUIRY IN ACTION

INTRODUCTION

This illustrative scenario of collaborative inquiry in action highlights **a team of first-grade teachers** studying their problems of practice around fluency; however, it's important to note that school and district leaders can experience equal levels of impact from such cycles of inquiry. Although leaders may not need to know as much about literacy as their teachers, the principal in the scenario chooses to learn beside the team. The principal also meets with her learning team to deepen her understanding of how to manage change so she can provide the necessary conditions to support the teachers' learning. Just as teachers have a class of students, education leaders have a class of teachers or others with whom they work.

As you read the scenario, note that each phase of the collaborative inquiry cycle involves evidence, learning, and action.

Phase 1: Analysis of assessment information to identify student and educator learning needs

What's going on for learners?

During phase 1 of the collaborative inquiry cycle, team members, with the principal, analyze data about students, educators, and systems to identify student learning needs and goals. A comprehensive analysis of data helps the team avoid exerting large amounts of energy in solving the wrong problem. *"Focusing on students' learning needs also reinforces for teachers that the primary purpose for participating in professional learning is to enhance those student outcomes that are valued by the community within which the students live and learn…Outcomes for students become the reason for teachers to engage in professional learning"* (Timperley, 2011).

It is mid-November and Ms. Jones' first-grade team meets to talk about a handful of students in each of their classrooms that has demonstrated little progress in reading fluency. Teachers have come to value the power of collective learning for addressing problems of practice. A teacher leader from the school leads the team in a comprehensive analysis of an array of student data to increase the team's comfort, competence, and confidence in analyzing the data brought to the meeting.

The teachers analyze the students' running records, noting rate data, as well as the expression with which the students have read. The teachers also share anecdotal notes taken during the students' guided reading. Members use probing questions to identify potential root causes for the students' struggles, while also making note of the students' strengths. They have learned to draw on students' assets to build additional literacy skills. As the teachers analyze the wealth of evidence in front of them, they consider whether the students are struggling with accuracy, automaticity, or prosody—all different aspects of fluency. Ultimately, the team decides their students are struggling most with prosody.

Most of their students seem to struggle with expression, they read word-by-word instead of in phrases or chunks, and they fail to use intonation or pauses to "mark" punctuation (e.g., periods, commas, and question marks). As they analyze the data, additional questions about the performance of individuals surface, such as *"I wonder if Joe's struggle with intonation and expression is due to a hearing problem?"* and *"Perhaps Sue has never been taught about punctuation marks."*

The teacher leader charts the questions raised for the teachers to see. She also makes notes in her journal about the teachers' increasing curiosity. The teachers agree to collect additional evidence before the next study group in order to inform their remaining questions before moving forward. At their next session, teachers bring answers to the questions and engage in additional dialogue to verify that the main challenge is helping students with intonation and expression.

After analyzing the student data, the teachers identify their own learning needs around teaching intonation and expression. The teacher leader engages Ms. Jones' team in studying both the literature on fluency and their current practice. They spend time studying the *Essential Instructional Practices in Early Literacy: Grades K to 3* (MAISA/GELN/ELTF, 2016) and other relevant literature to determine what the research says about teaching prosody. The teacher leader asks team members to share what they currently do to build students' capacity to read with intonation, phrasing, and expression. As team members talk about their current knowledge and practices, they begin to discover gaps in their professional knowledge base.

The principal assigns one of her teacher leaders to each of the school's grade-level teams to help members build their skills in collaboration, data analysis, and engagement in the phases of collaborative inquiry. Fortunately, each school in the district has a cadre of teacher leaders to draw on because the district followed **Recommendation 3.5:** *Participate in statewide efforts to prepare, support, and generate teacher leaders and instructional coaches to promote effective early literacy development and assessment practices, with an emphasis on the use of classroom formative assessment practices.*

Two statewide efforts to support teacher leaders that districts can consider include: Formative Assessment for Michigan Educators (FAME), and the *Literacy Essentials* series. Another resource, *A Systemic Approach to Elevating Teacher Leadership* (Killion, Harrison, Colton, Bryan, Delehant, & Cooke, 2016), can be useful for districts that wish to initiate or review and revise their approach to teacher leadership within schools or school systems.

Phase 2: Identification of shared learning goals for students and educators

Where will concentrating our energies make the most difference?

Ms. Jones' team understands that *"data-based decision making is key to ensuring [they] set the right [professional learning] goals, establish the appropriate learning targets, and accurately measure progress"* (Hirsh & Crow, 2018). With a shared understanding of what is going on for learners, the team focuses its attention on what teachers can do differently to change the experiences and outcomes for their

learners. The established student and educator learning goals become the focus of the team's inquiry and will guide their collective learning and actions.

Student learning goal:

By the end of the next six weeks, each of the identified students will demonstrate an increase in reading with expression. The teacher will collect four oral reading samples and make a holistic judgment about whether the sample was always, almost always, or rarely read with expression.

Teacher learning goal:

Teachers will increase their capacity to build students' prosody by identifying two new strategies and integrating their new learning into their guided reading program.

The **student learning goal** identified by Ms. Jones' defines equitable expectations for all students to achieve at high levels and holds teachers responsible for implementing appropriate strategies to support student learning. Learning for educators that focuses on student learning outcomes has a positive effect on changing educator practice and increasing student achievement.

Phase 3: Multiple opportunities to extend educators' professional knowledge

How will we engage in learning to achieve desired outcomes for both ourselves and our students?

With a clear focus and a deep understanding of what is causing their students' struggle with fluency, the team answers the following question: "How and where will we learn more about what to do differently?" Although all six phases of collaborative inquiry cycle lead to learning, this phase and the remaining ones are specifically designed to extend educators' knowledge of content (literacy and assessment); content-specific pedagogy for facilitating literacy development; students' background, assets, and learning processes; and how to monitor implementation of their new practices. Timperley and her colleagues (2014) write: *"This phase is critically important because better outcomes for learners are a result of teachers and leaders acquiring new knowledge and developing new skills that lead to new actions."* Without this new knowledge, *"inquiry can result in process without substance"* (Timperley, 2011).

During this phase the team, with the help of the teacher leader, conducts a thorough review of relevant research and evidence about different practices and principles that hold promise for improving fluency. As each new idea is reviewed, members consider how it might be better than what they were previously doing. The team identifies a few different strategies they want to learn more about and try with their students, including Readers Theater and repeated, echo, and choral reading. These evidence-based practices become the content of the team's professional learning.

With the focus of their learning identified, the team plans how they will accomplish their learning goal. Planning and designing professional learning for changes in educator practice require a sequence of learning designs as educators move from developing new knowledge and skills to implementing the change effectively. Some learning designs build educators' knowledge base. Some are more effective for developing educators' skills. Other designs support educators as they use their new skills in the workplace. With a well-designed plan, the team sets off on its learning journey.

Selecting appropriate learning designs requires understanding about all the following:

- learners' characteristics
- goals of the professional learning,
- conditions in which the learning occurs.

Knowledge about the wide range of available learning designs facilitates the decision-making process. Lois Easton's book *Powerful Designs for Professional Learning* (2015) provides an array of designs to choose from. The book features only learning designs that result in educators' active engagement in learning.

First, Ms. Jones' team attends a half-day workshop on building students' fluency hosted by the intermediate school district. They picked this program because it includes instruction on Readers Theater. During a follow-up session, the team is invited to observe a first-grade teacher in another school using Readers Theater with her students. The team previews the lesson with the teacher prior to the observation and then reflects on what they saw with the teacher afterwards. The conversation with the first-grade teacher helps the team move beyond a surface-level grasp of Reading Theater to a more complete understanding of its purpose, critical attributes, meaning, and connections to other approaches such as echo and choral reading.

With a foundational understanding of Readers Theater, the literacy coach engages teachers in a professional learning design called "lesson study." *"Lesson study is a complex process, supported by collaborative goal-setting, careful data collection on student learning, and protocols that enable productive discussion of sensitive issues"* (Lewis, 2015). Together, members of the team plan a lesson using Readers Theater. One member of the team teaches the lesson while others gather evidence of student learning and development. The team discusses the evidence gathered during the lesson, using it to improve the lesson. The revised lesson is taught in another classroom and observed by the group and discussed. During the lesson study, the literacy coach notices that the teachers' knowledge of content, pedagogy, and student thinking around developing students' prosody is deepening.

Phase 4: Selection and implementation of evidence-based strategies

What can we do differently to make enough of a difference?

Nothing will change for the learners unless the teachers do things differently as a result of their new learning. It is not until the new learning is implemented fully that team members really know whether the new strategy will or will not lead to the intended student outcomes. It is rare that the initial implementation of a new strategy goes as planned. Timperley and her colleagues (2014) suggest that taking action is a team sport. *"Usually we have to try something out in action, reflect on how it went (did it make enough of a difference), have someone help us to understand the ideas more deeply, and then try it out again"* (p. 17).

With new learning under their belts, Ms. Jones' team members begin to design lessons independent of one another using Readers Theater, and echo and choral reading. The team members share their plans during one of their planning meetings. They share their intended learning targets and success criteria. They identify how they will assess their students' progress and use the evidence of student learning to improve students' understanding of the intended fluency outcomes. Before leaving

the planning session, each teacher also identifies what evidence (i.e., next oral reading sample) they will gather and bring to the group to show their students' progress. Finally, the teachers leave and implement their planned lessons.

After several days they audio-record the next oral reading sample from their students, and the team analyzes the students' performances. Each member shares their perspective about why individual students may or may not be progressing. As they unpack this information, teachers adjust their practice to meet the latest learning challenges. A few team members engage in more workshops to develop a deeper understanding of how to integrate the new practices into their guided reading sessions.

In addition to designing and implementing lessons, the literacy coach schedules individual coaching sessions with teachers to support their continued implementation of Readers Theater. The literacy coach understands that educators need time to select an appropriate practice, try it out, be coached on it, analyze and reflect on the results, have someone help them to understand the ideas more deeply, then try it again, repeating as necessary.

Permanent changes in educator assessment and literacy practices are possible when educators take informed actions and there is sustained implementation support over time. Findings from Joyce's and Showers' (1982) seminal research indicates that implementation of professional learning that is reinforced by ongoing coaching increases the implementation of new practices by 60 percent. Michigan's *Essential Coaching Practices for Elementary Literacy* (MAISA/GELN/ELTF, 2016) identifies the critical qualifications, dispositions, activities, and roles of effective literacy coaches.

In addition, research indicates that there is a direct relationship between the duration of professional learning and the degree of teacher change (Desimone et al., 2002). It can take upwards of 50 hours of intensive professional learning to realize measurable results for students (Learning Forward, 2011).

Phase 5: Use of evidence to plan, monitor, and refine implementation of new practices

What is working, how do we know, and what needs to change?

The ultimate goal of cycles of inquiry in support of an ELAS is to make a difference to valued literacy outcomes for learners. Changes in practice do not always lead to significant improvement. As experienced in Phase IV, Ms. Jones' team members monitor progress against established literacy benchmarks to identify what needs to be refocused and refined and what more needs to be learned.

Team members use the formative assessment process, which is one of the most powerful forms of assessment, daily during instruction. They bring recordings of the students' reading to share and analyze with their colleagues. Team members develop and use common assessments. Additionally, members of the team use data collected at the school level to reflect on their implementation of new instructional approaches.

The leadership collects data using such processes as classroom walkthroughs, teacher observations, performance reviews, and video-recordings of instruction. This information is shared with the team to aid in the process of monitoring effectiveness and making adjustments.

Frequent assessment of progress provides the team timely feedback (Killion, 2019), which guides refinements in and accelerates implementation of new practices. Colton et al., (2015) found that when elementary teachers regularly analyzed student work of struggling learners with their team members, students' reading levels and writing skills significantly increased.

"When teachers, for example, design assessments and scoring guides and engage in collaborative analysis of student work, they gain crucial information about the effect of their learning on students" (Learning Forward, 2011, p. 29).

Phase 6: Evaluation of the impact of the professional learning

What impact has our professional learning had on student achievement?

In this final phase, the team determines the degree of success of student learning experienced as a result of the learning and implementation stage. The team collects another set of running records, analyzes the results, and compares these results with previous ones.

The teachers are delighted to see that most of the students who were struggling are now on track with their fluency. Readers Theater, as well as echo and choral reading, seem to be effective strategies for building the students' fluency. The team, however, is concerned about the few who are still struggling. They decide to analyze the running records of those students to figure out what their next area of inquiry might be.

Evaluating the effectiveness of professional learning and demonstrating its impact on student achievement is important. *Assessing Impact: Evaluating Professional Learning* (Killion, 2018) guides administrators, professional learning leaders, continuous improvement teams, and evaluators through a step-by-step results-based assessment of professional learning.

Assessment of the impact of professional learning should happen at two levels of the system:

- **On a large scale,** those responsible for professional learning in the district should evaluate their programs and link professional learning to student learning. Such an evaluation helps teachers, service providers, and leaders improve their programs.
- **At the classroom level,** teachers should use summative assessment information to determine whether the team is making enough of a difference in the learning of the students. Also, they should make on-going use of the formative assessment process, embedded in daily instruction, to monitor student learning and adjust instruction as necessary to measure and improve student achievement.

Tools/Resources for PHASE III:

A Systemic Approach to Elevating Teacher Leadership (Learning Forward, 2016)

This 24-page paper can be useful for districts who wish to initiate or review and revise the approach to teacher leadership within schools or school systems.

Available at learningforward.org/docs/default-source/pdf/a-systemic-approach-to-elevating-teacher-leadership.pdf.

Analyze and Plan Professional Learning Investments (Learning Forward, 2012)

This chart and checklist help educators structure discussions and reflections about resource use.

learningforward.org/docs/february-2012/tool331.pdf?sfvrsn=2

Assessing Impact: Evaluating Professional Learning, third edition (Corwin, 2017)

This book by Joellen Killion guides administrators, professional learning leaders, continuous improvement teams, and evaluators through a step-by-step, results-based assessment of the impact of professional learning on educator effectiveness and student achievement.

Available for purchase online.

Collaborative Inquiry (Michigan Assessment Consortium/Learning Forward, 2019)

This online, self-paced learning module explores collaborative inquiry and is one of a set of foundational assessment learning modules that provide an opportunity for engagement, reflection, and access to tools and other resources that can continue to support professional learning.

www.michiganassessmentconsortium.org/almodules

Establishing Time for Collaborative Professional Learning (Killion, 2013)

This 96-page workbook available from Learning Forward guides districts and schools as they develop, vet, and implement recommendations for increasing collaborative learning time for educators, and then evaluate the effectiveness of the change.

Available at https://learningforward.org/wp-content/uploads/2017/09/establishing-time-for-professional-learning.pdf.

Every Student Succeeds Act (ESSA) and Professional Learning (Learning Forward)

U.S. federal education law (ESSA) includes many provisions that influence how educators experience professional learning. This web page hosted by Learning Forward includes a definition of professional learning as reflected in ESSA and related resources.

learningforward.org/get-involved/essa

Literacy Essentials series (MAISA/GELN/ELTF, 2016)

This set of documents, mentioned earlier in this Guide, incorporate essential practices that support sustained, collaborative, job-embedded professional learning.

All are available at literacyessentials.org.

Essential Coaching Practices in Elementary Literacy
A set of research-supported literacy coaching practices that can be used to provide powerful job-embedded, ongoing professional development while enhancing literacy instruction through teacher expertise. (Intended to be partnered with the Essential Practices in Early Literacy K to 3 and other Literacy Essentials documents.)

Essential School-Wide and Center-Wide Practices in Literacy
These systematic and effective practices can be implemented at the organizational level in education and care settings to help children become proficient in reading.

Essential Instructional Practices in Early Literacy: Grades K-3
Professional development throughout the state can focus on this set of ten research-supported literacy instructional practices for daily use in the classroom.

Literacy Essentials: Online Modules
A series of online professional learning modules to help guide educators on the Essential Practices for Early Literacy.

Formative Assessment for Michigan Educators (FAME)

FAME is a professional learning initiative sponsored by the Michigan Department of Education (MDE) that promotes teacher collaboration and planning for effective formative assessment practice. It represents one source of support for a district's teacher leaders.

Learn more at www.FAMEMichigan.org.

Michigan Assessment Literacy Standards (MAC, 2016)

Endorsed by the Michigan Board of Education in 2016, the Assessment Literacy Standards provide a common framework to assist K-12 educators, students, families, and policymakers in becoming more knowledgeable about assessment purposes and uses. Standards are available for policymakers, district- and building-level administrators, teachers, and students and their families.

View or download at www.MichiganAssessmentConsortium.org/assessment-literacy-standards.

Assessment Learning Modules
The MAC's self-paced online learning modules are aligned to Michigan's Assessment Literacy Standards and can be accessed individually or as a series. The modules support sound assessment policy and professional learning in high-quality assessment practices. Nine modules are currently available addressing a range of assessment topics, including the Collaborative Inquiry process.

Modules are available at www.michiganassessmentconsortium.org/almodules.

Michigan's Professional Learning Policy (MDE, 2012)

Professional Learning Policy Available at www.michigan.gov/documents/ProfDevStdsVISWStrategies_4_9_03_C61067__A62638_12_09_02_62686_7.pdf

Michigan's Professional Learning Policy: Standards for Professional Learning Available at www.michigan.gov/documents/mde/PL_Standards_2012_pdf_11_7_12_470728_7.pdf.

Powerful Designs for Professional Learning, third edition (Learning Forward, 2015)

Lois Easton's book provides an array of professional learning designs that result in educators' active engagement in learning.

Available at learningforward.org.

Professional Learning Plans: A Workbook for States, Districts and Schools

This 155-page workbook written by Learning Forward offers information and tools to walk educators through seven planning steps, from data analysis to setting goals to identifying learning designs to monitoring the impact of professional learning.

Available at learningforward.org/docs/default-source/commoncore/professional-learning-plans.pdf?sfvrsn=4

Professional Learning Policy Review: A Workbook for States and Districts (Learning Forward, 2013)

This 85-page workbook by Joellen Killion provides states and local school districts with guidance to conduct a review of existing policies related to professional learning.

Available at www.learningforward.org/docs/default-source/commoncore/professionallearningpolicyreview.pdf

The bottom line on excellence: A Guide to Investing in Professional Learning that Increases Educator Performance and Student Results (Killion and Hirsh, 2012)

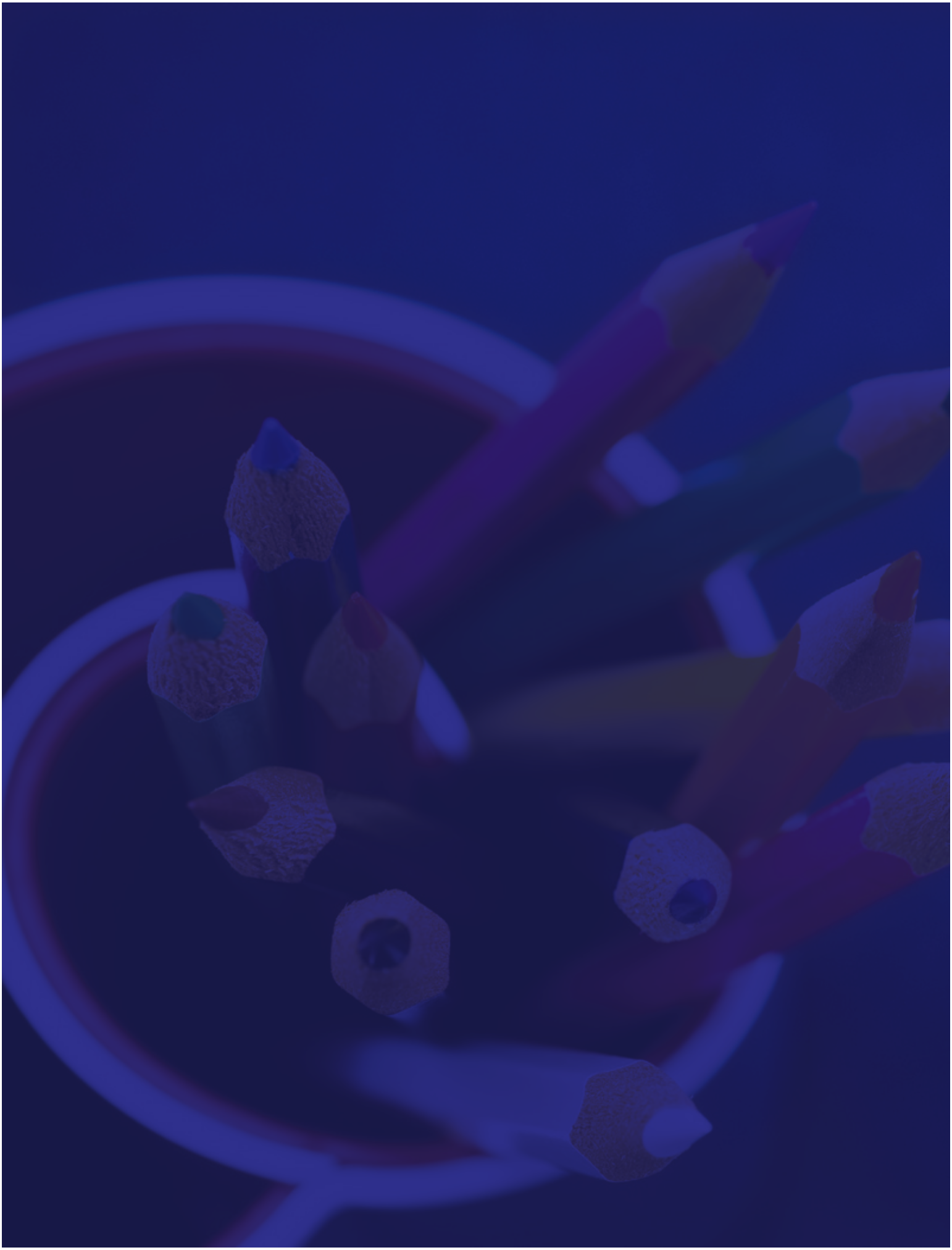
This article presents a list of principles that will guide districts and schools in allocating and assessing resources in professional learning.

Available at https://learningforward.org/docs/february-2012/killion331.pdf?sfvrsn=2.

A listing of all Tools and Resources mentioned in this Guide to help you develop an early literacy assessment system (ELAS) is available online at **www.MichiganAssessmentConsortium.org/ELAS.**

Notes

Assessment literacy is needed among multiple stakeholders so that educators at all levels have the knowledge and support structures to implement assessment systems that improve literacy achievement for all of Michigan's children.



Glossary of key assessment and literacy terms

TERMS	DEFINITIONS	SOURCES
	BASIC DEFINITIONS	
Literacy	The definitions below are used in this document. Together, they embrace the broad range of processes and factors (e.g., prior knowledge, self-regulation, reading strategies motivation, engagement) that influence literacy learning and development. 1. The ability to read, view, listen, write, speak, and visually represent to comprehend and to communicate meaning in various settings through oral, written, visual, and digital forms of expression. 2. The deployment of a constellation of cognitive, language, and social reasoning skills, knowledge, strategies, and dispositions, directed towards achieving specific purposes.	1. *Michigan's Action Plan for Literacy Excellence* 2. Educational Testing Service
Assessment Literacy	This term refers to the knowledge, skills, and dispositions education stakeholders (at all levels) need to have in order to administer educational assessment well and to use assessment data appropriately. To increase assessment literacy among Michigan's educators, policymakers, and students and their families, the Michigan Assessment Consortium (MAC) spearheaded the development of *Assessment Literacy Standards* by Michigan educators and national experts. The standards, endorsed by the Michigan State Board of Education in 2016, provide a common framework to assist K–12 educators, students, families, and policymakers in becoming more knowledgeable about assessment purposes and uses. The standards are intended for long-term use in the field of education, to continually support assessment literate educators.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
	ASSESSMENT FUNDAMENTALS	
Assessment Purposes	• Student Improvement — Using assessment results to review past instruction or to alter future instruction provided to the student, due to performance on the assessment. • Accountability — Using assessment results to hold educators or others responsible for the performance of students, educators, or school programs. • Program Evaluation — Using results to determine the success of a program and perhaps to suggest improvements. • Prediction — Using assessment results to determine the likelihood of the success of an individual in some future activity.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS

TERMS	DEFINITIONS	SOURCES
Assessment Methods	• Selected-Response Item — In this type of item, students select a correct answer from among several answer choices. This item type includes multiple-choice, true/false items, and matching items. The multiple-choice item format is the selected-response format most used in a large-scale assessment program. • Constructed-Response Item — The item type requires the individual to create their own answer(s) rather than select from prewritten options. There are usually several ways in which these items can be answered correctly. These items are scored using a standardized scoring rubric that is objective and clearly defined. • Performance Assessment — A type of assessment that requires the student to perform some activity. There are two types, distinguished by their complexity and the length of time students are given to respond: ◦ *Performance Task* — In this assessment, students have days, weeks, or months to compose a response. Thus, this type of assessment may involve multiple responses of different types to multiple prompts. The resultant work may be lengthy and comprise multiple parts. Embedded in the Task may be written response items, presentations, papers, student self-reflections, and so forth. ◦ *Performance Event* — This is an on-demand performance assessment on which students are given little or no time to rehearse their performances nor limited opportunities to improve their initial performances. Such assessment may take a class period or less to administer. • Personal Communication — An assessment conducted one-on-one between an adult and a student or small group of students - sometimes taking the form of an observation or interview.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
	TYPES OF ASSESSMENT	
Formative Assessment Assessment *for* Learning	Formative assessment is a planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary learning outcomes and support students to become more self-directed learners.	CCSSO FAST SCASS Fall 2017
Summative Assessment Assessment *of* Learning	Summative assessment provides information regarding the level of learner, program or school success at an endpoint in time. Administered at the conclusion of learning to 1) determine the effectiveness of a recently concluded program, 2) infer about a learner's mastery of curricular aims, and/or 3) meet local, state and federal accountability requirements.	Michigan Department of Education Definitions https://www.michigan.gov/documents/mde/Comprehensive_and_Balanced_Student_Assessment_System_Definitions_643701_7.pdf

TERMS	DEFINITIONS	SOURCES
Interim or Benchmark Summative Assessments	Interim/benchmark assessment measures changes in performance. They are administered periodically throughout the school year for one or more of the following purposes: predictive (identify learner readiness for success on a later summative assessment); evaluative (to appraise ongoing educational programs) and/or instructional (to supply teachers with individual learner performance data).	Adapted from the Michigan Department of Education Definitions https://www.michigan.gov/documents/mde/Comprehensive_and_Balanced_Student_Assessment_System_Definitions_643701_7.pdf
End-of-Year Summative Assessment	End-of-year/course summative assessment "…provides information regarding the level of learner, program or school success at an endpoint in time. Administered at the conclusion of learning to 1) determine the effectiveness of a recently concluded program, 2) infer about a learner's mastery of curricular aims, and/or 3) meet local, state and federal accountability requirements.	Adapted from the Michigan Department of Education Definitions https://www.michigan.gov/documents/mde/Comprehensive_and_Balanced_Student_Assessment_System_Definitions_643701_7.pdf
Achievement Test	A type of assessment used to determine the current level of knowledge and skills of an individual in a specific disciplinary or content domain. http://bit.ly/MI-ALS	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Aptitude Test	A type of assessment used to determine the ability of an individual to carry out a task or activity. Also indicates the extent to which an individual will be successful in a future activity.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Screener	A type of assessment used to determine eligibility of an individual for a program or activity.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Placement Test	A type of assessment used to determine the best program or instructional treatment for an individual.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Selection Test	A type of assessment used to determine which individuals will most likely be successful in a program.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS

TERMS	DEFINITIONS	SOURCES
Diagnostic Measures	Diagnostic assessment measures a student's specific skills (needs and/or assets) in order to provide in-depth information to guide instruction for *individual* learners as needed.	Adapted from Francis, D. J., Snow, C. E., August, D., Carlson, C. D., Miller, J., & Iglesias, A. (2006). Measures of reading comprehension: A latent variable analysis of the diagnostic assessment of reading comprehension *Scientific Studies of Reading, 10*(3), 301-322.
Observation	An assessment of one or more aspects of student performance by a trained observer, either in a natural setting or one that has been structured especially for the observation. A protocol or rubric may or may not be used by the observer.	Ed Roeber, Ph.D.
Progress Monitoring Assessment	Progress monitoring is used to quantify a learner's rate of improvement or responsiveness to instruction, intervention or supports and guide future learning. Progress monitoring can be implemented with individual learners and small groups. The frequency of measures should match the level of intervention intensity.	Adapted from Fuchs, D., & Fuchs, L. (2006). Introduction to Response to Intervention: What, why, and how valid is it? *Reading Research Quarterly,* 41, 93-99.
Balanced Assessment System	The use of different types of assessment for different and complementary purposes. Can also mean the use of assessment for learning (to guide it as it is occurring) and of learning (to measure how much students have learned at the end of instruction).	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Computer Adaptive Assessment	Assessment administered online in which the questions asked of students are determined by their performance on previous questions, permitting a more precise determination of the level of student performance on the assessment.	Ed Roeber Ph.D.
Alternate Assessment	Assessment in ELA, mathematics, and science for students with significant cognitive disabilities of the same content standards as assessed for other students, but adapted for the academic level of these students	Ed Roeber Ph.D.
English Language Proficiency Assessment	Assessment in the areas of reading, writing, listening, and speaking (as well as comprehension) for students in grades K–12 whose home language is other than English. Participation qualifies students for English language learning opportunities, and continues until (and beyond) when student reach pre-defined levels of English language proficiency	Ed Roeber Ph.D.
Criterion-Referenced Score Interpretation	Relating an assessment outcome such as a score to a pre-established absolute standard of performance.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS

TERMS	DEFINITIONS	SOURCES
Norm-Referenced Score Interpretation	The comparison of a student or school assessment outcome to a representative sample of students or schools – the norm group. Scores are interpreted as above or below the average (mean score) of the norm group.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
	TECHNICAL ASSESSMENT CONCEPTS	
Bias/Fairness	The way an assessment task is posed that disadvantages some students (due to factors other than their knowledge of the topic being assessed.)	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Construct	The specific aspect of knowledge, skill or ability that is the focus of an assessment, i.e., what the assessment is designed to reveal.	James Pellegrino, Ph.D.
Correlation	This is a demonstration of the extent to which two variables move in the same or opposite manner, although there is no proof that one causes the other. Values can range from -1 to +1.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Mean/Mode/ Median	These are different measures of the central tendency in a set of scores. *Mean* — The arithmetic average of scores in a group of students. The sum of all scores is divided by the number of scores to determine the mean. *Median* — This is the middle score in a set of scores when scorers are arranged in rank order. *Mode* — This is the most frequently occurring score (s) in a set of scores.	Ed Roeber Ph.D.
Standard Deviation/ Variance	These are measures of the degree of variation among scores in a set of scores. The smaller the value, the more homogeneous (similar) the set of scores.	Ed Roeber Ph.D.
Prediction	The use of assessment results to determine the likelihood of success of an individual in some future activity.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Reliability	A determination of the internal consistency, comparability or stability of an assessment. A necessary but not sufficient condition for an assessment to be useful.	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS

TERMS	DEFINITIONS	SOURCES
Validity	The collection of evidence to support the intended interpretive uses of an assessment. Note: The assessment itself is not "valid" or "not valid." It is the intended interpretive *use(s)* of the assessment that are or are not valid (for which there are sufficient evidence to support).	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Content Validity	Experts in literacy agree that the content of a literacy assessment matches the stated purpose of the assessment.	National Center on Intensive Intervention
Concurrent Validity	The assessment demonstrates at least 0.60 correlation with another commonly accepted assessment of the same literacy domain, when the assessments are administered at the same time.	National Center on Intensive Intervention
	STANDARD SETTING CONCEPTS	
Standard Setting	The process used by agencies to determine one or more levels of expected student performance on an assessment. Typically, a standard setting procedure is used that involves knowledgeable individuals. Their recommendations are usually reviewed and approved by a relevant policy group before being used in reporting student assessment results.	Ed Roeber, Ph.D.
Achievement Level	The standard of performance set through a standard-setting procedure. Also called a "performance standard." Defines how well students need to do on an assessment to meet or exceed predefined targets for achievement, such as "proficient."	*Assessment Literacy Standards – A National Imperative.* (2017). Mason, MI: Michigan Assessment Consortium. http://bit.ly/MI-ALS
Benchmarks	Benchmarks refer to any content- or policy-based information that is presented to participants during standard setting that helps participants make their cut point recommendations. The use of benchmarks in standard setting is well established (Phillips, 2012; McClarty et al., 2013). Many agencies have used benchmarks to provide actionable, policy-based information to participants during standard setting.	Phillips, 2012; McClarty et al., 2013

TERMS	DEFINITIONS	SOURCES
Performance Level Descriptors	PLDs summarize the knowledge, skills, and abilities expected of students in each performance level. Egan, Schneider, and Ferrara (2012) suggest a framework of four types of PLDs, described here. 1) *Policy PLDs* summarize the state's definition for each performance level, providing information to stakeholders on the state's suggested interpretation of each level. They are typically not specific to any given grade or content area. 2) *Range PLDs* summarize the knowledge, skills, and abilities expected of students in a given performance level on a specific assessment. Range PLDs show the types of content, as informed by the state content standards, that should be mastered by students in each performance level on the assessment at hand. 3) *Borderline PLDs,* are described as "threshold PLDs," are based on the range PLDs and summarize the knowledge, skills, and abilities expected of students who are at the point-of-entry (the *borderline*) of each performance level. For any given assessment, these descriptors show the types of skills needed just to be classified in a given level (e.g., just to be classified in the *Proficient* level). 4) *Reporting PLDs* are the version of the PLDs used for score reporting. Typically, a version of the policy or range PLDs are used, and the language in the reporting PLDs is adjusted to be accessible to a wide audience that may not have in-depth content knowledge.	Egan, K. L., Schneider, C., & Ferrara, S. (2012). Performance level descriptors: History, practice, and a proposed framework. In G. J. Cizek (Ed.), *Setting Performance Standards* (pp. 79-106). New York: Routledge.
	LITERACY FUNDAMENTALS	
Composition	The process of conveying meaning through oral, written (print or digital), visual language separately or in combination in many types of text (e.g., opinion, informative/explanatory, narrative) and is important to active citizenship, many professions, and daily life; and requires applications of writing conventions to construct clear and coherent writing in which the development, organization, and style are appropriate for specific tasks, purposes, and audiences across disciplines.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Comprehension	The ability to extract and construct meaning through interaction and involvement with oral, written, and visual language separately or in combination and the ultimate purpose of reading instruction.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf

TERMS	DEFINITIONS	SOURCES
Constrained/ Unconstrained Skills	**Constrained skills** are those that develop from non-existence to a high level of proficiency in early childhood. Examples of constrained skills include knowledge of the alphabetic principle (i.e., knowledge that written spellings systematically represent spoken words) and phonemic awareness (e.g., knowledge that spoken words can be conceived as a sequence of phonemes). **Unconstrained skills** are those skills that they continue to develop through the lifespan. Examples include vocabulary and comprehension.	Eunsoo Cho, Ph.D.
Construct	The specific aspect of knowledge, skill or ability that is the focus of an assessment, i.e., what the assessment is designed to reveal.	James Pellegrino, Ph.D.
Executive Function Skills	**Executive functions** are a set of higher-order cognitive processes that facilitates the coordination and control of cognition, emotion, and behavior in goal-directed activities. Executive functions include abilities to monitor and update information (working memory), to inhibit dominant responses or irrelevant responses, and to shift attention between mental sets or tasks.	https://www.ncbi.nlm.nih.gov/pubmed/10945922
Foundational Skills of Print Concepts and Decoding	*Print Concepts:* foundational knowledge about how print, in general, and books in particular, "work," including, but not limited to, knowledge of parts of texts. (See also related glossary item.) *Phonological awareness:* a set of foundational oral language skills that involve conscious awareness of sounds within the speech stream, and the segmentation and blending of sounds and that has reciprocal relationships with word reading, spelling, and vocabulary. (See also related glossary item.) *Phonics:* the connection between individual and groups of graphemes (letter symbols) and phonemes (letter sounds) that, among other things, allows readers to translate written symbols into meaningful words (decoding). (See also related glossary item.)	Michigan Department of Education (n.d.). Standards for the preparation of teachers of upper elementary (3-6) education. Retrieved from https://www.michigan.gov/documents/mde/Upper_Elementary_3-6_Education_Preparation_Standards_636731_7.pdf
Handwriting	The formation of letters in written text by hand, the legibility of which affects judgment and communicativeness of writing and the fluency of which affects written composition quality.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf

TERMS	DEFINITIONS	SOURCES
Morphology	An oral and written language concept comprised of the system by which the smallest units of meaning, called *morphemes* (bases and affixes), combine to form complex words; morphological/ structural analysis and synthesis are important to both decoding and encoding and are related to vocabulary development and reading comprehension.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Motivation and Engagement	Literacy motivation refers to the beliefs, values, goals, and dispositions that provide energy and direction for behaviors and thoughts of the individual related to literacy and is often conceptualized as intrinsic and extrinsic; literacy engagement refers to the cognitive, emotional, and social behaviors in academic or out-of-school settings that enable the individual to participate in literacy learning and gain expertise.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Orthographic patters	The sequence of letters and their association with a specific sound or sounds. For example, in English, one orthographic pattern is "oi," which typically represents the glided sound heard at the beginning of the word "oil."	Nell Duke, Ph.D.
Phonics	The connection between individual and groups of graphemes (letter symbols) and phonemes (letter sounds) that, among other things, allows readers to translate written symbols into meaningful words (decoding).	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Phonological Awareness	The set of foundational oral language skills that involve conscious awareness of sounds within the speech stream, and the segmentation and blending of sounds. Phonological awareness, particularly phonemic awareness, is important for development of concepts of print, decoding, and encoding.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf

TERMS	DEFINITIONS	SOURCES
Print Concepts	Print concepts, or concepts of print, are foundational knowledge about how print, in general, and books in particular, "work," such as understanding that print carries meaning, that print is authored, and that print is permanent; that graphics and print relate; that print is made up of graphemes which are associated with phonemes (alphabetic principle) and includes, but is not limited to, knowledge of parts of texts (e.g., front cover, table of contents, diagrams), where to start reading within a text, directionality, return sweep, alphabetic principle, orientation of letters, concept of word, capitalization, and ending punctuation.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Prosody	Patterns of stress or intonation in language, such as the rising intonation at the end of a question in English. An important feature of oral reading.	International Literacy Association. (2019). *Literacy glossary*. Retrieved from https://www.literacyworldwide.org/get-resources/literacy-glossary
Read-aloud	A read-aloud is the practice of a teacher or designated reader orally reading a text with large or small groups. Pictures or text may be shared visually with the students whose primary role is to listen and view the illustrations. The intent is to model proficient reading and language, promote conversation, motivate, and extend comprehension and conceptual understandings.	International Literacy Association. (2019). *Literacy glossary*. Retrieved from https://www.literacyworldwide.org/get-resources/literacy-glossary
Reading Fluency	Fluency entails accuracy, automaticity, and prosody; its role in reading development; and reciprocal relationships with, among other constructs, background knowledge, motivation, orthographic knowledge, morphological awareness, word recognition, syntax and reading comprehension (although strong fluency does not guarantee reading comprehension).	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Scaffolded Writing	An instructional technique designed to support children's emergent literacy development, including concepts of print, phonological awareness, and, in English, letter-sound knowledge. Developed by Deborah Leong, Elena Bodrova, and colleagues, in brief, the child and teacher negotiate a message the child would like to write; the teacher writes lines for each word in the message; child and teacher point to each line, repeating the message until it is internalized; and then the child attempts to write each word. The writing may be at any stage of development (e.g., scribbling; representing the first sound in each word).	Nell Duke, Ph.D.

TERMS	DEFINITIONS	SOURCES
Sheltered Instruction	An instructional framework that provides accessible and high-quality content and academic language instruction to address the academic and language needs of English learners. In sheltered instruction, English language instruction is integrated into other content-area classes to help English learners learn academic content and develop English language proficiency. See the source material for more information.	CAL practitioner brief. http://www.cal.org/siop/pdfs/briefs/using-sheltered-instruction-to-support-english-learners.pdf
Speaking and Listening	Speaking and listening involve receptive and expressive communication skills, including, and not limited to, engaging in high quality discussions of topics and the meaning and critical analysis of texts across disciplines to support and extend comprehension of multiple and multimodal texts; reporting on a topic; adapting speech to a variety of contexts and tasks, using formal language when appropriate to task and situation; interpreting multiple perspectives and information presented in diverse media and formats.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of upper elementary (3-6) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Upper_Elementary_3-6_Education_Preparation_Standards_636731_7.pdf
Spelling	A connection between individual and groups of phonemes (letters sounds) and graphemes (letter symbols) and morphemes (meaning units) that, among other things, allows readers to translate thoughts into written words (encoding).	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Syntax	An oral and written language concept comprised of a set of principles that govern phrase and sentence structure; in English syntax, these principles specify the relation of 12 word order and meaning; the grammar of the language indicates how words are combined to convey meanings; understanding syntax involves knowledge of parts of speech (e.g., verb, noun, adverb) and word order (which may vary from children's home language); phrases and sentences vary in complexity (simple, compound, complex, compound/complex); analysis of syntax helps to link structure and meaning.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
Vocabulary	An oral and written language construct that is central to everyday and academic language and involves general and discipline-specific vocabulary; knowledge of word meanings and the conceptual knowledge that underlies them; it includes understanding multiple meanings across contexts, figurative language, and morphological structure of words; it is central to oral language, academic language, reading comprehension, and written composition.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf

TERMS	DEFINITIONS	SOURCES
Word Recognition	The ability to translate written words into known words within the lexicon; words may be recognized based on decoding, prediction (for example, through initial letters, syntactic context, and semantic context), analogy, and sight; the ultimate goal is to read each word at sight, meaning automatically, but in order to attain this goal with large numbers of words, each word must be fully analyzed graphophonemically and morphophonemically; this applies to all words, including high- as well as low-frequency words and words that are not spelled as might be expected.	Michigan Department of Education (n.d.). Standards for the preparation of teachers of lower elementary (PK-3) education [PDF File]. Retrieved from https://www.michigan.gov/documents/mde/Lower_Elementary_PK-3_Education_Preparation_Standards_636730_7.pdf
	OTHER INSTRUCTIONAL TERMS	
Tiered Instruction/ Intervention	The language around Tiered instruction/interventions comes from the Response to Intervention model. The heart of any RTI model lies in the use of tiered instruction. In the RTI framework, the instruction delivered to students varies on several dimensions that are related to the nature and severity of a student's difficulties.	RTI Action Network www.rtinetwork.org/essential/tieredinstruction
Tier 1 instruction	All students in Tier 1 receive high-quality, scientifically based instruction, differentiated to meet their needs, and are screened on a periodic basis to identify struggling learners who need additional support.	RTI Action Network www.rtinetwork.org/essential/tieredinstruction
Tier 2 instruction	In Tier 2, students not making adequate progress in the core curriculum are provided with increasingly intensive instruction matched to their needs on the basis of levels of performance and rates of progress.	RTI Action Network www.rtinetwork.org/essential/tieredinstruction
Tier 3 instruction	In Tier 3, students receive individualized, intensive interventions that target the students' skill deficits for the remediation of existing problems and the prevention of more severe problems.	RTI Action Network www.rtinetwork.org/essential/tieredinstruction

References

Introduction

Coladarci, T. (2002). Is It a House... Or a Pile of Bricks? Important Features of a Local Assessment System. *The Phi Delta Kappan, 83*(10), 772-774. Retrieved January 14, 2020, from www.jstor.org/stable/20440251

Lapeer County, Macomb County, St. Clair County. (1999). *Michigan Literacy Progress Profile (MLPP).*

Literacy Essentials. (n.d.). Retrieved from https://literacyessentials.org/.

Michigan Assessment Consortium. (2016). *Assessment literacy standards.* Retrieved from www.michiganassessmentconsortium.org/assessment-literacy-standards

Michigan Department of Education. (n.d.). *Guide to State Assessments.*

Read by Grade Three Law, MCL 380.1280f (2016). Retrieved from http://www.legislature.mi.gov/documents/2015-2016/publicact/pdf/2016-PA-0306.pdf.

Section I

Desimone, L. M. (2009). *Improving impact studies of teachers' professional development: Toward better conceptualizations and measures*. Educational researcher, *38*(3), 181-199.

Douglas Reeves. (2016). *Take the Initiative Fatigue Challenge* [Video]. https://www.youtube.com/watch?v=egIcM6LRnwU

Michigan Department of Education. (2017). Michigan's action plan for literacy excellence [PDF file]. Retrieved from https://www.michigan.gov/documents/mde/MI_Action_Plan_Lit_Draft2_629757_7.pdf

Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Eds.) (2001). *Knowing what students know: The science and design of educational assessment*. Washington, DC: National Academies Press.

Sabatini, J., O'Reilly, T., & Deane, P. (2013). Preliminary reading literacy assessment framework: Foundation and rationale for assessment and system design. *ETS Research Report Series, 2013*(2), p.7.

Wallace Foundation. (n.d). https://www.wallacefoundation.org/knowledge-center/pages/the-school-administration-manager-project.aspx

Section III-1

Bryk, A. S., Sebring, P. B., Allensworth, E., Easton, J. Q., & Luppescu, S. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.

Childress, S., Elmore, R., Grossman, A., & Johnson, S. M. (Eds.). (2007). *Managing school districts for high performance*. Cambridge, MA: Harvard Education Press.

Cunningham, A. E., Etter, K., Platas, L., Wheeler, S., & Campbell, K. (2014). Professional development in emergent literacy: A design experiment of teacher study groups. *Early Childhood Research Quarterly, 31*, 62-77.

Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thomp- son, S., & Tilly, W. D. (2008). *Assisting students struggling with reading: Response to Intervention and multi-Tier 1ntervention for reading in the primary grades: A practice guide*. (NCEE 2009- 4045). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Hayes, L. L., & Robnolt, V. J. (2007). Data-driven professional development: The professional development plan for a reading excellence act school. *Reading Research and Instruction, 46*(2), 95-119.

Honig, M. I., & Hatch, T. C. (2004). Crafting coherence: How schools strategically manage multiple, external demands. *Educational Researcher, 33*(8), 16-30.

Lane, C., Prokop, M. J. S., Johnson, E., Podhajski, B., & Nathan, J. (2013). Promoting early literacy through the professional development of preschool teachers. *Early Years: An International Research Journal, 34*(1), 67-80.

Leithwood, K., & Azah, V. N. (2016). Characteristics of high-performing school districts. *Leadership and Policy in Schools, 16*(1), 27-53.

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force. (2016). *Essential instructional practices in early literacy.* Lansing, MI: Authors.

Mintrop, R. (2016). *Design-based school improvement: A practical guide for educational leaders*. Cambridge, MA: Harvard Education Press.

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force. (2016). *Essential instructional practices in early literacy: K to 3.* Lansing, MI: Authors.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge: Using a qualitative approach to connect homes and classrooms. *Theory into Practice, 31*(2), 132-141.

Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Eds.) (2001). *Knowing what students know: The science and design of educational assessment*. Washington, DC: National Academies Press.

Podhajski, B., Mather, N., Nathan, J., & Sammons, J. (2009). Professional development in scientifically based reading instruction: Teacher knowledge and reading outcomes. *Journal of Learning Disabilities, 42*(5), 403-17.

Reeves, D. (2016). From Leading to Succeeding: The Seven Elements of Effective Leadership in Education. Solution Tree Press. Bloomington, IN.

Ren, L. & Hu, G. (2013). A comparative study of family social capital and literacy practices in Singapore. *Journal of Early Childhood, 13*, 98-130.

Shepard, L. A., Penuel, W. R., & Davidson, K. L. (2017). Design principles for new systems of assessment. *Phi Delta Kappan, 98*(6), 47-52.

Slavin, R. E., Cheung, A., Holmes, G., Madden, N. A., & Chamberlain, A. (2013). Effects of a data-driven district reform model on state assessment outcomes. *American Educational Research Journal, 50*(2), 371-396.

Taylor, B., Pearson, P., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low-income schools. *The Elementary School Journal, 101*(2), 121-165.

Taylor, B. M., Pearson, P. D., Clark, K. F. & Walpole, S. (1999). *Beating the odds in teaching all children to read: Lessons from effective schools and exemplary teachers* (Center for the Improvement of Early Reading Achievement Report No. 2¾4006). Ann Arbor, MI: University of Michigan School of Education.

Torgesen, J. K., Alexander, A. W., Wagner, R. K., Rashotte, C. A., Voeller, K. K. S., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities, 34*(1), 33-58.

Turnbull, B. J., Arcaira, E., Sinclair, B. (2011). *Implementation of the national SAM innovation project: A comparison of project designs*. Policy Studies Associates, Inc. Washington DC.

Warren, M. R. (2005). Communities and schools: A new view of urban education reform. *Harvard Educational Review, 75*(2), 133-173.

Section III-2

Council of Chief State School Officers. (2015). *Comprehensive Statewide Assessment Systems: A framework for the role of the state education agency for improving quality and reducing burden*. Washington, DC: Council of Chief State School Officers.

Chattergoon, R. & Marion, S.F. (2016). Not as easy as it sounds: Designing a balanced assessment system. *The State Education Standard, 16*, 1, 6-9.

Coladarci, T. (2002). Is it a house...or a pile of bricks? Important features of a local assessment system. *The Phi Delta Kappan, 83*(10), 772–774. Retrieved from www.jstor.org/stable/20440251

Conley, D. T. (2018). *The promise and practice of next generation assessment*. Cambridge, MA: Harvard University Press.

Darling-Hammond, L., Herman, J., Pellegrino, J., Abedi, J., Aber, J. L., Baker, E., . . . Steele, C. M. (2013). *Criteria for high-quality assessment.* Stanford, CA: Stanford Center for Opportunity Policy in Education. Retrieved from https://edpolicy.stanford.edu/library/publications/847.

Deeper Learning 4 All. (2018). *10 principles for building a high-quality system of assessments*. Boston, MA: Jobs for the Future. Retrieved from https://deeperlearning4all.org/wp-content/uploads/2018/02/10-principles.pdf

Koretz, D. (2009). *Measuring up: What educational testing really tells us.* Cambridge, MA: Harvard University Press.

Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Eds.) (2001). *Knowing what students know: The science and design of educational assessment.* Washington, DC: National Academies Press.

Pellegrino, J. W., Wilson, M. R., Koenig, J. A., & Beatty, A. S. (Eds.) (2014). *Developing assessments for the Next Generation Science Standards.* Washington, D.C.: The National Academies Press.

Wilson, M. R., & Bertenthal, M. W. (2006). *Systems for state science assessment.* Washington, DC: National Academies Press.

Section III-3

Alexander, P. A. (1997). Knowledge-seeking and self-schema: A case for the motivational dimension of exposition. *Educational Psychologist, 32*(2), 83-94.

Ahmed, Y., Francis, D. J., York, M., Fletcher, J. M., Barnes, M. A., & Kulesz, P. (2016). Validation of the direct and mediation (DIME) model of reading comprehension in grades 7 through 12. *Contemporary Educational Psychology, 44*, 68-82. https://doi.org/10.1016/j.cedpsych.2016.02.002

Bereiter, C. & Scardamalia, M. (2012). What will it mean to be an educated person in mid-21st century? Retrieved from https://www.ets.org/Media/Research/pdf/bereiter_scardamalia_what_will_mean_educated_person_century.pdf

Boykin, A.W. & Noguera, P. (2011). *Creating the opportunity to learn: Moving from research to practice to close the achievement gap*. Alexandria, VA: ASCD Press.

Cain, K. & Oakhill, J. (2012). The precursors of reading ability in young readers: Evidence from a four-year longitudinal study. *Scientific Studies of Reading, 16*(2), 91-121. https://doi.org/10.1080/10888438.2010.529219

Cartwright, K. B. & Duke, N. K. (2019). The DRIVE Model of reading: Making the complexity of reading accessible. *The Reading Teacher, 73*(1), 7-15.

Catts, H. W., Hogan, T. P., & Fey, M. E. (2003). Subgrouping poor readers on the basis of individual differences in reading-related abilities. *Journal of Learning Disabilities, 36*(2), 151-164. https://doi:10.1177/002221940303600208

Connor, C. M., Morrison, F. J., & Petrella, J. N. (2004). Effective reading comprehension instruction: Examining child by instruction interactions. *Journal of Educational Psychology, 96*, 682-698.

Connor, C. M., Morrison, F. J., & Slominski, L. (2006). Preschool instruction and children's emergent literacy growth. *Journal of Educational Psychology, 98*, 665-689.

Connor, C. M., Morrison, F. J. & Underwood, P. (2007). A second chance in second grade: The independent and cumulative impact of first- and second-grade reading instruction and students' letter-word reading skill growth. *Scientific Studies of Reading, 11*, 199-233.

Connor, C. (2019). Using technology and assessment to personalize instruction: Preventing reading problems. *Prevention Science, 20*, 89-99.

Duke, N., Lindsey, J. B., & Brown E. M. (n.d.). Free or very low cost early literacy assessments. Retrieved from https://www.michigan.gov/documents/mde/Free_and_Very_Low_Cost_Assessments_FINAL_3-23-18_621439_7.pdf

Ehri, L. C., Nunes, S. R., Stahl, A. S., & Willows, D. M. (2001). Systematic phonics instruction helps students learn to read: Evidence from the national reading panel's meta-analysis. *Review of Educational Research, 71*(3), 393-447.

Francis, D. K , Kulesz, P. A., and Benoit, J. S. (2018). Extending the simple view of reading to account for variation within readers and across texts: The complete view of reading (CVRi). *Remedial and Special Education*, 39(5) 274–288.

Goldman, S. R., Britt, M. A., Brown, W., Cribb, G., George, M., Greenleaf, C….Shanahan, C.; Project READI (2016). Disciplinary literacies and learning to read for understanding: A conceptual framework of core processes and constructs. *Educational Psychologist, 51*, 219-246.

Graesser, A. (2015). Deeper learning with advances in discourse science and technology. *Policy Insights from the Behavioral and Brain Sciences, 2*(1), 42-50.

Hidi, S. (2006). Interest: A unique motivational variable. *Educational Research Review, 1*, 69-82.

Hoffmann, L., Baumert, J., Krapp, A., & Renninger, K. A. (1998). Interest and learning: Proceedings of the Seeon Conference on interest and gender. *IPN, 164*.

Justice, L. M., & Ezell, H. K. (2001). Word and print awareness in 4-year-old children. *Child Language Teaching and Therapy, 17*(3), 207–225. https://doi.org/10.1177/026565900101700303

Kintsch, W. & van Dijk, T. A. (1978). Toward a model of text comprehension and production. *Psychological Review*, 95, 164-182.

LaRusso, M., Kim, H. Y., Selman, R., Uccelli, P., Dawson, T., Jones, S., . . . Snow, C. (2016). Contributions of academic language, perspective taking and complex reasoning to deep reading comprehension. *Journal of Research on Educational Effectiveness*, 9, 201-222.

McNamara, D. S., Graesser, A., & Louwerse, M. (2012). Sources of text difficulty: Across genres and grades. In J. P. Sabatini & E. Albro (Eds.), *Assessing reading in the 21st century: Aligning and applying advances in the reading and measurement sciences* (pp. 89-116). Lanham, MD: R&L Education.

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force. (2016). *Essential instructional practices in early literacy.* Lansing, MI: Authors.

Michigan Department of Education. (2017). Michigan's action plan for literacy excellence [PDF file]. Retrieved from https://www.michigan.gov/documents/mde/MI_Action_Plan_Lit_Draft2_629757_7.pdf

Mehta, P. D., Foorman, B. R., Branum-Martin, L., & Taylor, W. P. (2005). Literacy as a unidimensional multilevel construct: Validation, sources of influence, and implications in a longitudinal study in grades 1 to 4. *Scientific Studies of Reading, 9*(2), 85-116.

National Institute of Child Health and Human Development. (2000). National reading panel: Teaching children to read. Retrieved from https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf

Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Eds.) (2001). *Knowing what students know: The science and design of educational assessment*. Washington, DC: National Academies Press.

Paris, S. G. (2005). Reinterpreting the development of reading skills. *International Reading Association, 40*(2), 184-202. doi:10.1598/RRQ.40.2.3

Pressley, M., Wharton-Mcdonald, R., Allington, R., Block, C. C., Morrow, L., Tracey, D., … Woo, D. (2001). A Study of Effective First-Grade Literacy Instruction. *Scientific Studies of Reading, 5*(1), 35–58. https://doi:10.1207/s1532799xssr0501_2

Rand Reading Study Group. (2002). *Reading for understanding*. Santa Monica, CA: RAND Corporation.

Renninger, K. A., Hidi, S., & Krapp, A. (Eds.). (1992). *The role of interest in learning and development.* Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Renninger, K., & Hidi, S. (2011). Revisiting the conceptualization, measurement, and generation of interest. *Educational Psychologist,* 46(3), 168-184.

Sabatini, J. P., Bruce, K., & Steinberg, J. (2013). *SARA reading components tests, RISE form: Test design and technical adequacy.* ETS Research Report No. RR-13-08. Retrieved from https://www.ets.org/research/policy_research_reports/publications/report/2013/jppb

Scanlon, D. M., Vellutino, F. R., Small, S. G., Fanuele, D. P., Sweeney, J. M. (2005). Severe reading difficulties—Can they be prevented? A comparison of prevention and intervention approaches. *Exceptionality, 12*(4), 209-227.

Schatschneider, C., Wagner, R. K., & Crawford, E. C. (2008). The importance of measuring growth in response to intervention models: Testing a core assumption. *Learning and Individual Differences, 18*(3), 308–315. https://doi.org/10.1016/j.lindif.2008.04.005

Schweinhart, L. J., Berrueta-Clement, J. R., Barnett, W. S., Epstein, A. S., & Weikart, D. D. (1985). Effects of the Perry preschool program on youths through age 19: A summary. *Topics in Early Childhood Special Education Quarterly, 5*(2): 26-35.

Schweinhart, L. J., Weikart, D. P., Larner, M. B. (1986). Consequences of three preschool curriculum models through age 15. *Early Childhood Research Quarterly, 1*(1),15-45.

Snow, C. (2002). *Reading for understanding: Toward a R&D Program in reading comprehension.* Arlington, VA: RAND.

Snow, C. E, Burns, M. S., Griffin P. (Eds.). (1998). *Preventing reading difficulties in young children.* Washington, DC: National Academy of Education.

Solano-Flores, G. (2011). Assessing the cultural validity of assessment practices: An introduction. In M. Basterra, E. Trumbull, & G. Solano-Flores (Eds.). *Cultural validity in assessment: Addressing linguistic and cultural diversity* (72-95). New York, NY: Routledge.

Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology, 38*(6), 934-947.

Stiggins, R. J. (2002). Assessment crisis: The absence of assessment FOR learning. *Phi Delta Kappan, 83*(10), 758-765. https://doi.org/10.1177/003172170208301010

Stiggins, R.J. (2007). Assessment for learning: A key to student motivation and learning. *Phi Delta Kappan EDGE, 2*(2), 19.

Vellutino, F. R., Scanlon, D. M., Small, S., & Fanuele, D. P. (2006). Response to Intervention as a vehicle for distinguishing between children with and without reading disabilities: Evidence for the role of kindergarten and first-grade interventions. *Journal of Learning Disabilities, 39*(2), 157-169. https://doi.org/10.1177/00222194060390020401

Section III-4

Allensworth, E. M., & Easton, J. Q. (2005). The on-track indicator as a predictor of high school graduation.

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for Educational and Psychological Testing*. Washington, D.C.: American Educational Research Association.

American Institutes for Research, National Center on Intensive Instruction. (n.d.). Academic Progress Monitoring Tools Chart. Retrieved from https://charts.intensiveintervention.org/chart/progress-monitoring.

Balfanz, R., Bridgeland, J. M., Moore, L. A., & Fox, J. H. (2010). Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic. *Civic Enterprises*.

Blachman, B. A., Schatschneider, C., Fletcher, J. M., Murray, M. S., Munger, K. A., & Vaughn, M. G. (2014). Intensive reading remediation in grade 2 or 3: Are there effects a decade later? *Journal of educational psychology, 106*(1), 46.

Connor, C. M., Morrison, F. J., & Petrella, J. N. (2004). Effective reading comprehension instruction: Examining child by instruction interactions. *Journal of Educational Psychology, 96*(4), 682–698.

Connor, C. M., Spencer, M., Day, S. L., Giuliani, S., Ingebrand, S. W., McLean, L., & Morrison, F. J. (2014). Capturing the complexity: Content, type, and amount of instruction and quality of the classroom learning environment synergistically predict third graders' vocabulary and reading comprehension outcomes. Journal of educational psychology, 106(3), 762.

Foorman, B. A., Beyler, N. A., Borradaile, K. A., Coyne, M. A., Denton, C. A., Dimino, J. A., … Wissel, S. A. (2016). *Foundational Skills to Support Reading for Understanding in Kindergarten through 3rd Grade.* (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from whatworks.ed.gov.

Foorman, B. R., Herrera, S., Petscher, Y., Mitchell, A., & Truckenmiller, A. (2015). The structure of oral language and reading and their relation to comprehension in kindergarten through grade 2. *Reading and Writing, 28*(5), 655–681. https://doi:10.1007/s11145-015-9544-5

Foorman, B. R., Koon, S., Petscher, Y., Mitchell, A., & Truckenmiller, A. (2015). Examining general and specific factors in the dimensionality of oral language and reading in 4th–10th grades. *Journal of Educational Psychology, 107*, 884-899. doi:10.1037/edu0000026.

Foorman, B. R., Petscher, Y., Lefsky, E. B., & Toste, J. R. (2010). Reading First in Florida: Five years of improvement. *Journal of Literacy Research, 42*(1), 71-93.

Foorman, B. R., Petscher, Y., Stanley, C., & Truckenmiller, A. (2017). Latent profiles of reading and language and their association with standardized reading outcomes in kindergarten through tenth grade. *Intervention, Evaluation, and Policy Studies, 10*, 619-645. doi:10.1080/19345747.2016.1237597

Foorman B., Wanzek J. (2016) Classroom Reading Instruction for All Students. In: Jimerson S., Burns M., VanDerHeyden A. (eds) Handbook of Response to Intervention. Springer, Boston, MA.

Filderman, M. J., Toste, J. R., Didion, L. A., Peng, P., & Clemens, N. H. (2018). Data-based decision making in reading interventions: a synthesis and meta-analysis of the effects for struggling readers. *The Journal of Special Education, 52*(3), 174-187. doi:0022466918790001.

Gersten, R., Compton, D., Connor, C.M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W.D. (2008). Assisting students struggling with reading: Response to Intervention and multi-Tier 1ntervention for reading in the primary grades. A practice guide. (NCEE 2009-4045). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from ies.ed.gov/ncee/wwc/publications/practiceguides/.

Gersten, R., Newman-Gonchar, R. A., Haymond, K. S., & Dimino, J. (2017). What is the evidence base to support reading interventions for improving student outcomes in grades 1–3? (REL 2017–271). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from ies.ed.gov/ncee/edlabs.

Graham, S., McKeown, D., Kiuhara, S., & Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of educational psychology, 104*(4), 879-896.Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from ies.ed.gov/ncee/wwc/publications/practiceguides/

Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from ies.ed.gov/ncee/wwc/publications/practiceguides/

Heritage, M., Harrison, C. (2019). *The power of assessment for learning: Twenty years of research and practice in the UK and US classrooms.* Corwin Press

Hernandez, D.J., (2012). Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation. *The Annie E. Casey Foundation:* New York, NY.

Kilpatrick, D. A. (2015). *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties.* Hoboken, NJ: Wiley.

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force. (2016). *Essential instructional practices in early literacy.* Lansing, MI: Authors.

Parker, D. C., Zaslofsky, A. F., Burns, M. K., Kanive, R., Hodgson, J., Scholin, S. E., & Klingbeil, D. A. (2015). A brief report of the diagnostic accuracy of oral reading fluency and reading inventory levels for reading failure risk among second- and third- grade students. *Reading & Writing Quarterly: Overcoming Learning Difficulties, 31*(1), 56-67, doi:10.1080/10573569.2013.857970

Rayner, K., Foorman, B. R., Perfetti, C. A., Pesetsky, D., & Seidenberg, M. S. (2001). How Psychological Science Informs the Teaching of Reading. *Psychological Science in the Public Interest, 2*(2), 31–74. doi:10.1111/1529-1006.00004.

Renninger, K., & Hidi, S. (2011). Revisiting the conceptualization, measurement, and generation of interest. *Educational Psychologist*, 46(3), 168-184.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science, 18*, 119-144.

Scarborough, H. (2001). Connecting early language and literacy to later reading (dis) abilities: Evidence, theory, and practice. In S. Neuman, & D. Dickinson (Eds.). *Handbook of early literacy research* (pp. 97–141). New York, NY: Guilford Press.

Scammacca N., Fall A.M., & Roberts G. (2015) Benchmarks for Expected Annual Academic Growth for Students in the Bottom Quartile of the Normative Distribution. *Journal of Research on Educational Effectiveness*, 8:3, 366-379, DOI:10.1080/19345747.2014.952464

Snow, C. E., Griffin, P., & Burns, M. S. (Eds.). (2005). Knowledge to support the teaching of reading: Preparing teachers for a changing world. San Francisco, CA: Jossey-Bass.

Stecker, P. M., Fuchs, L. S., & Fuchs, D. (2005). Using curriculum-based measurement to improve student achievement: review of research. *Psychology in the Schools, 42*(8), 795–819. doi:10.1002/pits.20113.

Torgesen, J. K., Wagner, R. K., Rashotte, C. A., Rose, E., Lindamood, P., Conway, T., & Garvan, C. (1999). Preventing reading failure in young children with phonological processing disabilities: Group and individual responses to instruction. *Journal of Educational Psychology, 91*(4), 579-593.

U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2017). *Standards Handbook Version 4.0*. Washington, DC: Author. https://ies.ed.gov/ncee/wwc/handbooks

Section III-5

Anderson, R.C. (1984) Some reflections on the acquisition of knowledge. *Educational Researcher,* 13, 5-10.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Berliner, D.C. (1986). In pursuit of the expert. *Educational Researcher,* 15(7), 5-13.

Colton, A., Langer, G. & Goff, L. (2015). The collaborative analysis of student learning: Professional Learning that Promotes Success for All. Thousand Oaks, CA.: Corwin Press.

Colton, A., & Sparks-Langer, G. M. (1993). A Conceptual Framework to Guide the Development of Teacher Reflection and Decision Making. *Journal of Teacher Education, 44*(1), 45–54. https://doi.org/10.1177/0022487193044001007

Darling-Hammond, L. & McLaughlin, M. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan,* 76(8), 597-604.

Darling-Hammond, L., Hyler, M.E., & Gardner, M. (2017). Effective teacher professional development. Palo Alto, CA: Learning Policy Institute.

Darling-Hammond, L., Wei, R.C., Andree, A., Richardson, N. & Orphanos, S. (2009). Professional learning in the learning profession: A status of report on teacher development in the United States and abroad. *National Staff Development Council.*

Desimone, L.M., Porter, A., Garet, M. Yoon, K. & Birman, B. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Education Evaluation and Policy Analysis,* 24(2), 81-112.

DuFour, R. & Mattos, M. (2013). How do principals really improve schools? *Educational Leadership,* 70(7), 34-40.

Easton, L. (2015). Powerful Designs for Professional Learning. Learning Forward. Oxford. OH.

Eells, R. (2011). Meta-analysis of the relationship between collective efficacy and student achievement. Unpublished doctoral dissertation. Loyola University of Chicago.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What Makes Professional Development Effective? Results from a National Sample of Teachers. *American Educational Research Journal*, 38(4), 915–945. https://doi.org/10.3102/00028312038004915

Guerra, P.L. & Nelson, S.W. (2009). Changing professional practice requires changing beliefs. *Phi Delta Kappan,* 90(05), 354-359.

Hattie, J. (2016). Mind frames and maximizers. 3rd Annual Visible Learning Conference held in Washington, DC.

Halbert, J. and Kaser, L. (2016). *Spirals of inquiry for equity and quality.* The BC Principals' & Vice-Principals' Association. Canada.

Hirsh, S & Crow, T. (2018). Becoming a learning team: A guide to a teacher-led cycle of continuous improvement. Learning Forward: Oxford, Ohio.

Jensen, B., Sonnemann, J., Roberts-Hull, K. and Hunter, A. (2016). Beyond PD: Teacher professional learning in high-performing systems. The National Center on Education and the Economy: Washington, D.C.

Joyce, B. & Showers, B. (1982). The coaching of teaching. *Educational Leadership*, 40(1), p4-8.

Killion, J. (2019) (2nd ed.). The feedback process: Transforming feedback for professional learning. Oxford, Ohio: Learning Forward.

Killion, J. (2017). Assessing impact: Evaluating professional learning. Thousand Oaks, CA: Corwin.

Killion, J., Harrison, C., Colton, A., Bryan, C., Delehant, A., & Cooke, D. (2016). A systemic approach to elevating teacher leadership. Oxford, OH: Learning Forward.Killion, J. (2013). Establishing Time for Professional Learning. Learning Forward. Oxford. OH.

Killion, J. (2013). Professional Learning Plans: A workbook for states, districts, and schools. Learning Forward. Oxford. OH.

Killion, J. (2013). Professional learning policy review: A workbook for states and districts. Learning Forward. Oxford. OH.

Killion, J. & Hirsh, S. (2012). The bottom line on excellence. *Journal of Staff Development.* 33(1), 10-16.

Learning Forward. (2019). *The path to instructional excellence and equitable outcomes.* Oxford, OH: Author.

Learning Forward (2011). *Standards for Professional Learning.* Oxford, OH: Author.

Lewis, C.C. (2015) (3rd Ed.) Lesson study. L. Easton (Ed.). *In Powerful designs for professional learning* (209-222).

Love, N.B., Stiles, K.E., Mundry, S.E., & DiRanna, K. (2008). *The data coach's guide to improving learning for all students: Unleashing the power of collaborative inquiry.* Thousand Oaks, CA: Corwin Press.

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force. (2016). *Essential instructional practices in early literacy.* Lansing, MI: Authors.

Mezirow, J. (1995). Transformation theory of adult learning. In M.R. Welton (Ed.) *In defense of the lifeworld* (pp. 39-70). New York: SUNY Press.

Scanlon, D.M., Gelzheiser, L.M., Vellutino, F.R., Schatschneider, C., & Sweeney, J.M. (2008). Reducing the Incidence of Early Reading Difficulties: Professional Development for Classroom Teachers vs. Direct Interventions for Children. *Learning and Individual Differences, 18(3),* 346-359.

Sawyer, I., & Stukey, M. R. (2019). Professional learning redefined: an evidence-based guide. Thousand Oaks, CA: Corwin.

The Aspen Institute. (2018). Developing a professional learning system for adults in service of student learning. *Education & Society Program.*

Timperley, H. (2011). Realizing the power of professional learning. Open University Press: New York, NY.

Timperley, H., Kaser, L., & Halbert, J. (2014). A framework for transforming learning in schools: Innovation and the spiral of inquiry. Centre for Strategic Education Seminar Series Paper No. 234.

Woolfolk, A., Winne, P., and Perry, N. (2012). *Education Psychology* (5th ed.). Toronto: Pearson.

Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs

Landscape of literacy initiatives across Michigan

STATEWIDE INSTRUCTION & ASSESSMENT INITIATIVES IN MICHIGAN

Michigan's Action Plan for Literacy Excellence (2017-2020)

Michigan Department of Education

Serves as a vision for educational leaders and stakeholders to support a P-20 system that will move Michigan to be a Top 10 Education State in 10 years. The plan provides common goals and activities necessary for effective and efficient implementation of the strongest research-validated literacy practices for driving policy, professional learning, instruction, and literacy leadership.

Learn more at bit.ly/MI-Lit-Action

FAME (Formative Assessment for Michigan Educators)

Michigan Department of Education/Michigan Assessment Consortium

FAME is a professional learning initiative sponsored by the Michigan Department of Education that promotes teacher collaboration and planning for effective formative assessment practice. A cadre of Michigan educators serves as coaches for site-based learning teams of teachers and administrators in Michigan schools.

Learn more at https://famemichigan.org

MDE Multi-Tiered System of Supports

Michigan Department of Education

The Michigan Department of Education has identified MTSS as a key strategy to assisting schools to make Michigan a top 10 education state. The department is working to develop an effective and comprehensive MTSS to support a shared understanding of what it is and support schools in using the framework to support all student needs. A practice profile of MTSS has been developed and usability testing is happening in select regions known as the Transformation Zones.

Learn more at https://www.michigan.gov/mde/0,4615,7-140-28753_65803_86454---,00.html

MDE Read by Grade Three assessment and instruction support

Michigan Department of Education

Legislation and funding were adopted by the state to increase the number of students demonstrating proficiency in the state summative English language arts assessment. The Read by Grade Three law and State School Aid Act call for the department to choose literacy assessment systems and schools to use these systems.

Learn more at https://www.michigan.gov/mde/0,4615,7-140-28753_74161-410821--,00.html

STATEWIDE WORKFLOW SUPPORT INITIATIVES

MiRead – Michigan's Early Literacy Portal

Michigan Association of Intermediate School Administrators/ Michigan Collaboration Hub (MiCH)

This portal that works with the Data Hubs is being built to identify students who may need literacy support, create Individual Reading Improvement Plans (IRIPs), and meet the requirements of the Read by Grade Three law. Use of the tool will provide access to prior IRIPs when students change districts and promote the *Essential Instructional Practices in Early Literacy* (MAISA/GELN/ELTF, 2016). MiRead is being piloted and is projected to be available to school districts in 2020.

Learn more https://www.gomaisa.org/organizations/michigan-collaboration-hub-mi-ch/miread

OTHER LARGE-SCALE LITERACY INITIATIVES

Essential Instructional Practices in Early Literacy

MAISA GELN Early Literacy Task Force

Literacy Essentials are research-supported instructional, leadership, and coaching practices codified in a series of documents. They are designed for Michigan teachers to improve literacy development starting at birth through grade 12. The Literacy Essentials provide effective approaches to markedly improve literacy skills among Michigan's children and students.

Learn more at https://literacyessentials.org

Reading Now Network (RNN)

Michigan Association of Superintendents and Administrators (West Michigan)

School superintendents from 20 West Michigan counties formed the network to improve early literacy and with a goal to ensure a minimum of 80% of third-graders in all demographic groups read proficiently at grade level. In their review of schools that were identified as outperforming similar schools, the team found five elements the schools had in common. The group continues to support schools in shining a light on their literacy successes and needs.

Learn more at gomasa.org/readingnow

High Impact Leadership (HIL) Project

A partnership between Western Michigan University, Reading Now Network (RNN), General Education Leadership Network (GELN)

This U.S. Department of Education grant-funded project works with school leaders to make literacy success for all students job number one. HIL Project works to equip and empower principals and teacher leaders with school renewal strategies that result in change. They are helping a growing number of elementary schools implement the GELN Literacy Essentials with greater

intentionality and strategic processes in where schools are committed to the goals of the Reading Now Network (RNN). The HIL Project provides stipends to support school literacy efforts, professional learning and networking events, and on-site facilitation coaching by educators skilled and experienced in literacy and leadership. Facilitation coaches are trained, guided, and supported by a core team from Western Michigan University in collaboration with literacy implementation experts from the RNN and GELN collaboratives.

Learn more at https://hilwmu.org

Launch Michigan

A partnership of business, education, labor, philanthropy, and civic leaders, as well as parents, who care about education and Michigan's collective future. The goal is to ensure a high-quality, student-centered system that will help every student succeed in school, in their careers, and in life. Launch will build an agenda for the effort that includes a focus on early literacy.

Learn more at https://launchmichigan.org

LOCAL/REGIONAL ACTIVITIES

Intermediate School District Literacy Coaches Network

Michigan Department of Education/MAISA GELN Early Literacy Task Force

Beginning in 2016 Michigan's State School Aid Act has provided grants to Intermediate School Districts to offset the cost of hiring early literacy coaches. Coaches are required to follow the MDE Early Literacy Coaching Model, and the Early Literacy Task Force created and maintains the Early Literacy Coaching Network to ensure early literacy coaches have the necessary ongoing training in the *Essential Instructional Practices in Early Literacy,* and *Essential Instructional Practices in Literacy* (MAISA/GELN/ELTF, 2016), to bring effective practices to local educators.

Learn more:

MDE Early Literacy Coaching Model: www.michigan.gov/documents/mde/EL_Coaching_Essential_Practices_Final_Digital_629305_7.pdf

MAISA/GELN/ELTF: *Essential Coaching Practices for Elementary Literacy* https://literacyessentials.org/literacy-essentials/the-essentials/essential-instructional-practices-for-elementary-literacy

We also recognize the many local and regional libraries, business partnerships, charitable foundations, and others who are collaborating with schools to improve literacy learning in their communities.

Contributors to this Guide

Principal Contributor Group

Principal Contributors brought to this project a wide range of expertise in cognitive science, educational assessment, literacy development, professional learning, and organizational development. Principal Contributors were responsible for researching, drafting, reviewing, and revising all content in this Guide. The group is chaired by Jim Pellegrino, Ph.D., Distinguished Professor of Psychology and Education, and Co-director of the Learning Sciences Research Institute at the University of Illinois at Chicago.

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Responder Group participants represent a variety of Michigan programs, organizations, and initiatives connected to Michigan's literacy initiatives. They participated in a series of webinars and meetings where they responded to concepts and text presented at various points of the Guide's development. Their thoughtful and constructive feedback is reflected throughout the final Guide. They are charged with helping to promote the use of the Guide among their colleagues and using the Guide to inform their work in their respective roles.

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EARLY LITERACY ASSESSMENT SYSTEMS

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