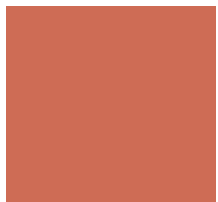
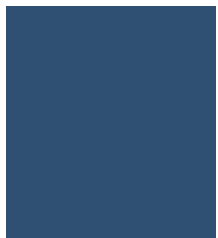


# INTENSIFYING LITERACY INSTRUCTION



Essential Practices

## Citation

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## Introduction

**Sharon Vaughn, Meadows Center for Preventing Educational Risk,  
The University of Texas**

“Once you learn to read, you will be forever free.” — Frederick Douglass

Reading provides the ultimate pathway to opportunity. Whether it is an opportunity to enjoy, learn, share experiences, or broaden horizons – reading is the gift that allows all of these to occur. I have spent the better part of the last six decades thinking about reading - initially learning to read, then reading as a passion, then learning about how to teach students to read, and now contributing to our empirical understanding of teaching reading – particularly for those students with reading difficulties. This obsession with reading and writing is the backdrop for my enthusiasm for the *Intensifying Literacy Instruction: Essential Practices* developed in collaboration with the Michigan Department of Education. This guide provides an evidence-based framework for educators as they make decisions about improving literacy instruction for students at-risk for reading and writing difficulties or with significant reading and writing needs. I am thrilled that this extraordinary document serves as a framework for educators. I also suspect they will recognize the importance of this guide and find ways to advantage themselves of its critical principles and practices.

What are some of the reasons I like this document so much? First, this document introduces evidence-based practices throughout its instructional sequence that includes screening for students with reading difficulties, on-going progress monitoring to inform instructional decisions, and a feasible approach to using the components of reading as levers for adjusting instruction to meet learners’ needs. Second, I like the sensible way the document articulates the cornerstones of effective reading and writing instruction for all learners - as well as those with the most pressing reading difficulties. This sensible approach appeals to educators to fit with their goals and gives them specified practices they so want and need. Third, I embrace the professional way the practices are described, recognizing the considerable knowledge of educators as well as their no-nonsense approach to wanting clearly articulated guidance. I am confident that this document will be beneficial to educational leaders, teachers, school psychologists, and other professional educators as they work collaboratively to design the most effective literacy programs for students. Remember, in the words of Frederick Douglass; we have the responsibility to contribute to students’ being “forever free.”

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## Purpose

The purpose of this document is to increase the capacity of practitioners and educational leaders to support a broad range of learners who need more literacy supports to become skilled readers and writers by identifying a set of essential practices that are research-supported and should be the focus of professional development throughout the state. These practices for intensifying literacy instruction apply to those learners with severe and persistent reading and writing challenges who have not responded when provided with instruction aligned with state academic standards, regardless of disability status.

Because intensifying literacy instruction requires an “all hands-on deck” approach, this document focuses on a range of stakeholders who need to be engaged in implementation efforts, including leaders (district and school administrators), teachers (general education and special education), and interventionists. A secondary audience that will find this document useful includes pre-service teachers, content experts/specialists, and teacher preparation faculty. It should be used in conjunction with state approved guidance documents, and in-depth professional learning materials that are designed to positively impact students’ literacy development in early elementary, elementary and secondary settings.

In many cases, students with and without disabilities who have reading and writing challenges are being supported within a Multi-Tiered System of Supports (MTSS) framework. MTSS provides an evidence-based framework for effective classroom instruction, assessment practices, and intervention supports necessary to prevent or remedy students’ difficulties. MTSS frameworks encompass a three-tiered approach to effectively meeting the needs of all students. It is critical to understand that merely *implementing* an MTSS framework is insufficient. Rather, ensuring all practices of an MTSS framework are selected and successfully used within an evidence-based set of decisions is necessary. This means decisions about instructional practices, assessments, and interventions, to the extent possible, align with evidence and with professionals who possess the necessary knowledge and skills to increase the overall effectiveness of implementing MTSS.

This document is intended to serve as the foundation for establishing policy, allocating resources, and providing professional learning opportunities to address the needs of a range of students with literacy difficulties, including, but not limited to, those with disabilities. In an MTSS framework, the increasingly intensive instructional and intervention supports would be categorized as Tier 2 and Tier 3. Though these Tier 2 and Tier 3 type approaches likely occur in small groups as a supplement to their Tier 1 or class-wide (core) literacy instruction; it is important to recognize that most of the students receiving those supports spend a majority of their instructional time in the general education classroom/core subject area setting. Therefore, it is imperative the information in this document informs professional learning and

coaching supports not just for special educators and additional staff providing intervention (Tier 2 and Tier 3) - but also for classroom teachers.

These five practices are the most critical aspects of assuring students receiving Tier 2 and Tier 3 interventions are provided necessary intensive literacy instruction. They include:

1. Knowledge and use of a learning progression for developing skilled readers and writers
2. Design and use of an evidence-based intervention platform as the foundation for effective intervention
3. On-going data-based decision making for providing and intensifying interventions
4. Adaptations to increase the instructional intensity of the intervention
5. Infrastructures (systems) to support students with severe and persistent literacy needs

The practices are sequenced in such a way as to focus attention first on the skills needed to become a successful reader and writer and then to expand upon the supports needed in order to successfully develop those skills. Although this document is written for a broad audience and its contents are relevant for all the audiences outlined above, the primary individuals responsible for enacting the contents of each practice will either be leaders (district and school administrators), or teachers (general education and special education) and interventionists. A statement following the introduction of each practice indicates who, primarily, needs to understand and act upon its contents. The intent is to increase clarity for readers.

## Knowledge and Use of a Learning Progression for Developing Skilled Readers and Writers

### *Teachers and interventionists primarily need to understand and act upon this Essential Practice.*

Knowledge and use of a learning progression for developing skilled readers and writers has been intentionally selected as the first practice because this is the cornerstone for building a system that is supportive of a broad range of learners. A learning progression is defined as a “carefully sequenced set of building blocks that students must master en route to a more distal curricular aim. The building blocks consist of subskills and bodies of enabling knowledge.”<sup>1</sup> The absence of a learning progression “significantly affects the difficulty or ease students have with learning new skills.”<sup>2</sup> Before further explanation is provided, three critical points need to be considered to help frame the contents of this practice:

1. Reading and writing are their own distinct but interconnected set of skills. It is important for educators to understand them as two unique skill clusters, so each is recognized as a valuable element to their instruction. However, mechanisms for integrating reading and writing are the ultimate goals.
2. The Simple View of Reading<sup>3</sup> and Simple View of Writing<sup>4</sup> are evidence-based models for understanding these two sets of skills.
3. Learning progressions that are anchored to these two models help inform a scope and sequence of instruction that is beneficial for all students but is critical for students with severe and persistent reading and writing needs.

For clarity, reading and writing will be explained as two distinct but interconnected literacy goals. Although they both rely on common knowledge (e.g., alphabetic principle, phonemic and morphemic awareness, sound-symbol correspondence), common processes (e.g., communication processes), and common skills<sup>5</sup>, reading and writing require their own significant amount of instruction separately and in combination.<sup>6</sup> Writing is an important skill that benefits reading<sup>7</sup>, while at the same time, students who struggle with reading will inevitably struggle to be proficient writers.<sup>8</sup> Considering reading and writing separately provides clarity in defining the learning progression necessary to develop instructional practices to promote skilled readers and writers. This learning progression spans early elementary, elementary, and secondary grades and is a critical first step in designing a high-quality, Individualized Intensive Intervention Plan. More information about an Intensive Intervention Plan is provided in Practice 4.

The Simple View of Reading<sup>9</sup> (Figure 1) and The Simple View of Writing<sup>10</sup> (Figure 3) are frameworks that will be used to define the learning progression for reading and writing. It is important to note the Simple View of Reading and Simple View of Writing are **NOT** simple. For example, the Simple View of Reading is a well-researched, thorough framework for understanding the variations in components that contribute to reading comprehension at any point in reading development for not only English-speaking readers but also for second language learners and dual-language users.<sup>11</sup> The Simple View of Reading states reading comprehension is the product of printed word recognition and language (linguistic) comprehension.<sup>12</sup> Because this model is a multiplicative explanation for the development of reading comprehension, at no point in the developmental learning progression should instruction focus exclusively on only one of the two parts. Although specific components of the Simple View of Reading are more relevant at different developmental periods (e.g., more emphasis on word reading initially and less emphasis overtime as students have developed more sophisticated and complex word reading abilities), instruction must effectively integrate the word recognition and language comprehension components.<sup>13</sup>



Figure 1. The Simple View of Reading

The Simple View of Reading serves as a theoretical foundation for building a learning progression for developing skilled readers that is derived from evidence-based reading research. The learning progression is designed to develop novice readers into skilled readers spanning pre-kindergarten through 12<sup>th</sup> grades. Figure 2 outlines this learning progression, which includes a hierarchy of easy to complex skills to teach the word recognition (decoding) and language comprehension components necessary for skilled comprehension of written text. Each component of the Simple View of Reading is represented as its own row in the table separated by a solid black line. Each of the component skills for word recognition and language comprehension are represented by a shaded bar that is placed within a specific grade-level band. Each bar represents an evidence-based estimate for when typical readers master these skills. Some of the component skills include a thin line spanning through subsequent grades, which represents on-going use, refinement, and generalization of the skills.

There are two important notes when interpreting the learning progression in Figure 2. **First, it is important to note that each of the component skills listed within shaded bars can and should be further operationally defined and presented in a more in-depth instructional scope and sequence for teacher use.** For example, Phonological Awareness involves three levels of skill: early, basic, and advanced<sup>14</sup>, with each level corresponding to different reading phases.<sup>15</sup> State approved academic standards and district-approved curriculum resources should be accessed for further delineation of the scope and sequence for the component skills. It is also important to note those students who would benefit from small group or individualized intensive instruction to further develop their reading skills will require formal instruction in skills below their current grade-level placement. The key is to know the skill acquisition level of each student for each component and to align instruction accordingly. For example, 3rd-grade readers who are reading at the 1st-grade level could require instruction in component skills below the third grade (e.g., basic phonics).

Writing, like reading, requires the integration of many component skills, including morphology (e.g., meaningful word units such as prefixes and suffixes) and syntax (e.g., rules for the use of words and phrases in sentences). These skills can be classified into two domains, like the Simple View of Reading. The first domain of skilled written expression includes transcription skills (e.g., handwriting [inclusive of letter formation], keyboarding, spelling), which are also commonly referred to as “foundation skills” and are used for the mechanics of transcription (i.e., putting language down on paper or on a screen). The second domain includes translation skills for composing text, or generating ideas and translating them into language appropriate for the writing task and audience (i.e., using the writing process to plan, write, revise, and edit).

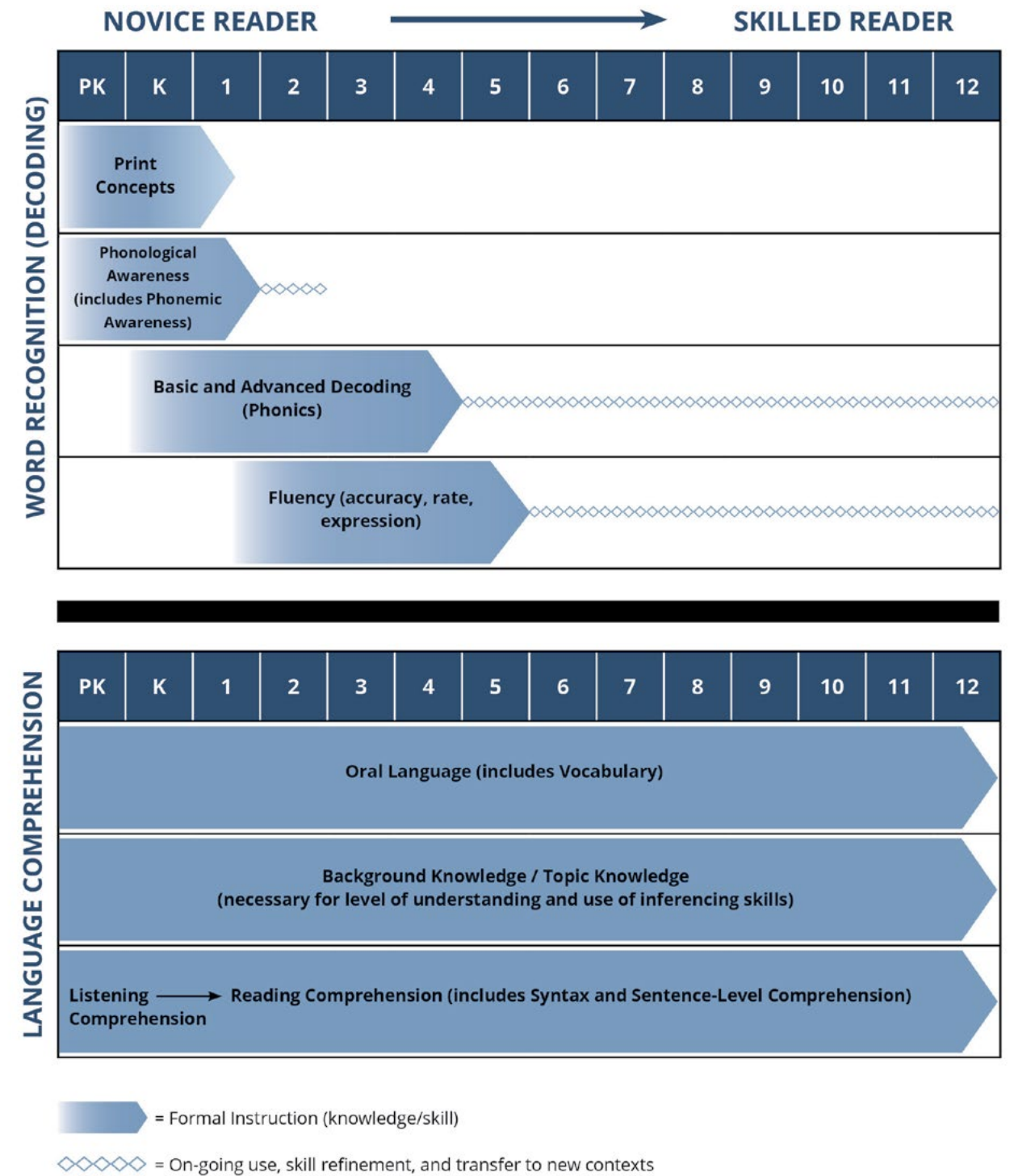


Figure 2. Learning Progression for Developing Skilled Readers

The Simple View of Writing<sup>16</sup> (Figure 3) suggests that writing is represented by an integrated array of knowledge and skills used during writing tasks within one's limited working memory capacity. This array of knowledge and skills includes transcription (spelling, handwriting, and keyboarding), text generation, or translation (writing formulated ideas on paper at the word, sentence, and discourse levels). It also includes skills necessary to focus attention, remember instructions, juggle multiple tasks that are initially supported by others, and to coordinate transcription and text generation (e.g., conscious control of attention, concentration, efforts). Transcription skills and knowledge, in particular, are foundational to writing development and performance<sup>17</sup>, as they exert a strong influence over the success of translation processes in writing tasks (at least those that do not rely on dictation) due to limited cognitive capacity. Thus, unless and until transcription is automatized, written expression is likely to be more limited in length and quality.<sup>18</sup>

"Writing, like reading, is defined from a developmental standpoint.<sup>19</sup> It begins with the acquisition of foundational skills and then systematically leads to the application of more sophisticated techniques"<sup>20</sup>, like translation skills, to effectively organize and express ideas throughout the grades. Translation skills are grounded in oral language and its components, namely (a) vocabulary and semantics—language content, (b) grammar, morphology (the building blocks of meaning are including roots, prefixes, and suffixes) and syntax (the building blocks of sentences such as various phrasal and clausal structures)—language form, and (c) pragmatics (applying culturally-bound rules for using language effectively in diverse social contexts)—language use. **At no time in the writing learning progression would an instructor focus on one part of the equation to the exclusion of the other part.**



Figure 3. The Simple View of Writing

Figure 4 outlines a learning progression for teaching writing. It includes a hierarchy of easy to complex transcription and translation skills necessary to be an accomplished writer. Each of the component skills for writing foundations and composition are represented by a shaded bar that is placed within a specific grade-level band. Each bar represents an evidence-based estimate for when these skills should be mastered by typical writers. Some of the component skills include a thin line spanning through 12<sup>th</sup> grade, which represents on-going use, refinement, and generalization of the skills. The same two caveats provided for the reading progression apply to the writing progression as well. **Each of the component skills listed within green bars can and should be further operationally defined and presented in a more in-depth instructional scope and sequence.** For example, teaching sentences begins by teaching students what constitutes a complete sentence (e.g., subjects and predicates are generally required to express a complete thought) and where the boundaries exist between complete and incomplete sentences (defining and recognizing sentence fragments, clauses, and phrases). Sentence instruction would progress by teaching students the different types of sentences. **Additionally, students who would benefit from small group or individualized intensive instruction to learn how to write likely still require formal instruction in skills below their current grade-level placement.**

The learning progressions presented in Figures 2 and 4 are cornerstones for the remaining practices because they not only inform a scope and sequence for instruction that benefits all learners but are critical to learners with severe and persistent learning needs. Connecting these learning progressions to evidence-based models for understanding reading and writing as two distinct but interconnected constructs gives educators a guide to the depth of knowledge they need to prioritize when sequencing their instruction to meet the needs of a broad range of learners.

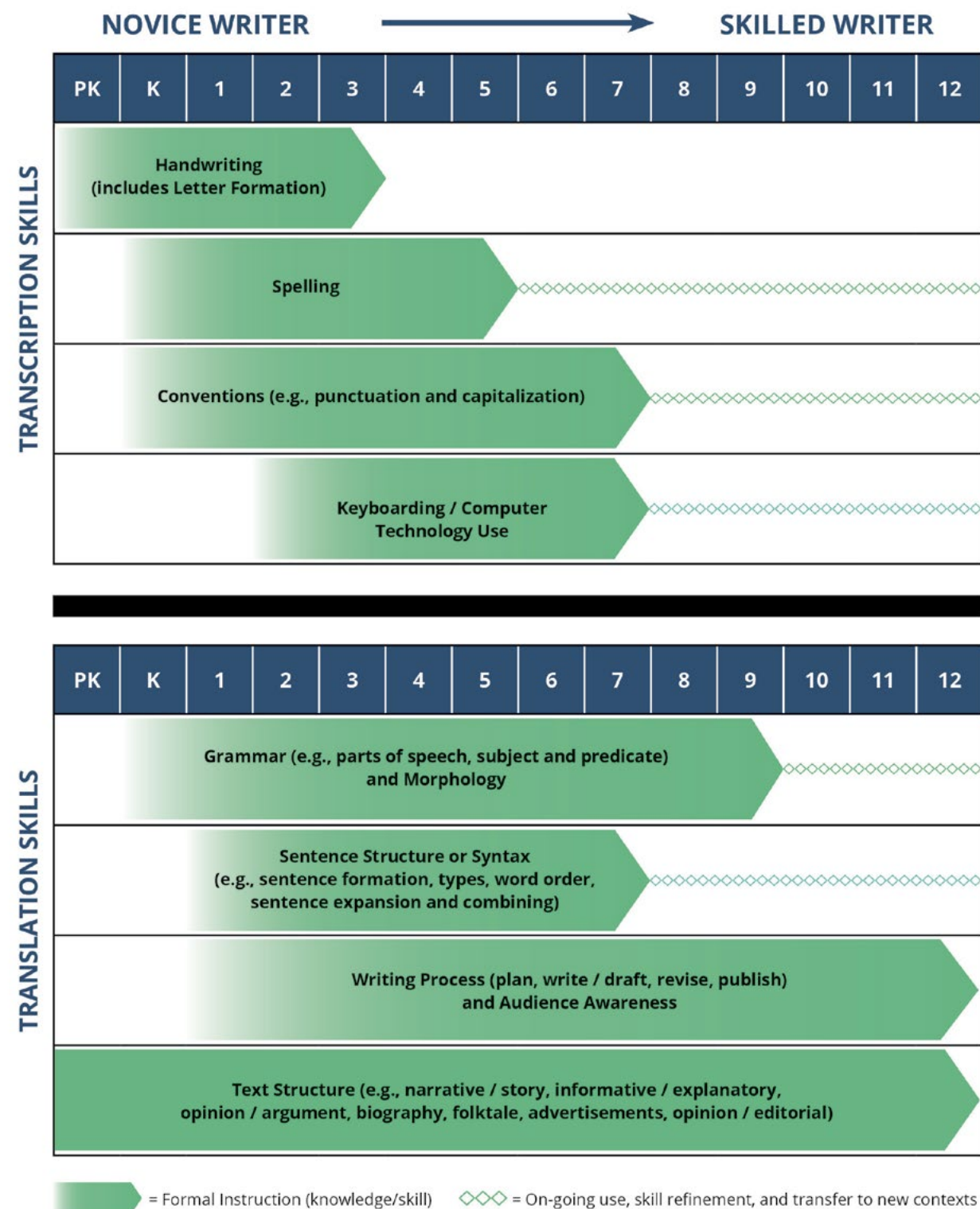


Figure 4. Learning Progression for Developing Skilled Writers

### Design and Use of an Intervention Platform as the Foundation for Effective Intervention

*Leaders primarily need to understand and act upon this Essential Practice.*

An “intervention platform” is a collection of practices or programs that have been intentionally reviewed and selected to be used as the foundation, or building blocks, for customizing intervention.<sup>1</sup> For example, an evidence-based program to support improvements in decoding and word recognition has been chosen to be used with students whose data indicate additional instruction is needed to develop accuracy in reading words containing specific letter-sound correspondences. Students are practicing the decoding and word recognition skills by reading decodable text that contains a large number of words that include the letter-sound correspondences and high-frequency words that were the focus of instruction. This is to develop students’ abilities to instantly and effortlessly read words containing those letter-sound correspondences by sight. If used alone, this evidence-based program could be an incomplete way to adequately address some students’ needs to be able to read a variety of text accurately, at an appropriate rate, and with expression to fully understand text. Additional evidence-based components would need to be carefully chosen from the intervention platform to ensure a more complete instructional program to efficiently and effectively meet the needs of students.

It is important to know, the evidence-based curriculum resources and practices included in an intervention platform are not expected to be developed by individual teachers. Designing effective reading and writing intervention materials requires significant expertise in the content area (reading or writing), instructional design principles, and learning science. It also requires a significant amount of time, which teachers do not have given their daily responsibilities. For this reason, to ensure schools have carefully designed, systematic intervention platforms for students to access who have instructional needs beyond what can be met in the classroom, district leaders need to engage in a thorough review, selection, and de-selection process. This does not mean district leaders operate in isolation when reviewing interventions. Instead, they use a process that is inclusive of people knowledgeable of literacy to help make the best decisions given the available research and the district’s context. Through engaging in this review process, it is possible new interventions may need to be adopted for use, while current interventions may need to be discontinued if information gathered during the review reveals current interventions are not effective for use.

The adoption of evidence-based curriculum resources includes multiple components, and one must consider how the resources will fit within a given context. The National Implementation



Research Network (NIRN) has developed the Hexagon Discussion and Analysis Tool which outlines the components of a quality review, selection, and de-selection process<sup>2</sup> so districts, on an annual basis, can engage in review to make informed decisions. Specific to the examination of intervention resources, special attention must be paid to the following dimensions (aspects) of intervention intensity<sup>3</sup> to increase confidence the interventions included in the district's Intervention Platform will effectively accelerate student progress:

- **Strength:** Intervention studies are analyzed to determine if the interventions being considered have demonstrated effects with students scoring below the 20<sup>th</sup> percentile. Interventions that have gone through rigorous evaluation present a variety of assessment data to demonstrate if students learned the skills that the intervention taught and if learning those skills translated into students being able to perform well on more comprehensive assessments that measure a broader set of skills beyond the focus of the intervention. Effect sizes should be reviewed to determine if the intervention has produced meaningful effects on important student outcomes for students most at-risk.
- **Dosage:** Information about the number of lessons, length of time for each lesson, group size recommendations, and the number of opportunities a student is required to demonstrate their learning during the lesson (verbal, written, physical responses) is gathered. Dosage should increase as the intensity of the students' needs increase.
- **Alignment:** The primary content focus of the intervention instruction is determined. Curriculum resources materials that are selected to be included in the district's Intervention Platform should purposefully target the skills (where appropriate) within the learning progression outlined in Figures 2 and 4 for developing skilled readers and writers.
- **Comprehensiveness (elements of explicit instruction):** The intervention lessons should be designed to include explicit instruction elements. This means that the instructional language written into the intervention includes clear and concise verbiage. The lessons devote time to developing necessary background knowledge so students can successfully demonstrate what they are expected to do for the lesson. There is also sufficient teacher modeling of efficient solution strategies to help students accurately arrive at an answer or to provide an appropriate response (e.g., multi-syllabic word decoding, morphological analysis, text structure). There are also a number of practice opportunities for the teacher to observe student progress to inform additional instructional decisions that should occur during the lesson. Gradual fading of instructional supports (e.g., interventionist provides the support, followed by fading to peers providing each other supports, then to the student having independent practice

opportunities) are built into the lessons so when the student engages in individual practice, there is an increased likelihood they will be successful. The intervention also includes distributed and cumulative practice where the interventionist is working with students to review what has been taught, and then they apply what they have learned to increasingly more complex tasks. During all phases of instruction, copious amounts of feedback should be provided, both explicit affirmative (e.g., telling the student why their response is accurate/acceptable) and informative (e.g., telling the student why their response is incorrect/unacceptable). This helps reduce the possibility of error-prone learning.

- **Attention to transfer:** Interventions are analyzed to determine the degree to which the intervention supports students using what they are learning in varied contexts outside of the intervention instruction (e.g., classroom, core subject area classes).
- **Behavioral support:** The intervention is reviewed to determine if strategies are incorporated into the lessons to help students' engagement in the lessons (e.g., students are attending to the lesson by participating throughout and providing responses when expected). It is also important for interventions to include strategies to support students in having a mindset where they believe they are able to succeed in performing the tasks/activities that have been repeatedly challenging. These strategies coupled with mechanisms to help students to effectively control their emotions and thoughts to help achieve their goals will assist teachers in being able to create a context and climate around the student that is very motivating.

There are published interventions designed to address specific learning needs that have been evaluated in research studies that meet standards for technical rigor and that have demonstrated meaningful effects on important student learning outcomes. The amount of time and skill required to design an intervention inclusive of all the dimensions of intervention intensity outlined above would be a cumbersome undertaking. For this reason, districts should consider accessing resources available that have evaluated the evidence for published interventions. Examples include the National Center for Intensive Intervention (NCII) Academic Tools Chart,<sup>4</sup> What Works Clearing House,<sup>5</sup> Evidence for ESSA, and Best Evidence Encyclopedia.<sup>6</sup> Resources from the examples provided would begin to provide information about the quality of research and strength of evidence for specific interventions for which research data have been submitted by publishers to be reviewed. District leaders will still need to thoroughly review the other dimensions of intervention intensity and consider implementation costs, available resources and additional resources needed for implementation **prior to** making selections.

## On-going Data-Based Decision Making for Providing and Intensifying Interventions<sup>1</sup>

*Teachers, interventionists and leaders need to understand the three assessment types outlined in this practice. Leaders need to also understand and act upon the information provided in the second part of this practice on utilizing a high-quality review, selection and de-selection process for assessments.*

Student data must be used in an on-going way to assist teachers in making the best decisions possible to inform the provision of intervention supports. There are different types of data that are used for different purposes to help make these decisions. The district should carefully review and select three assessment types that are commonly used for intervention instructional decisions including: (1) screening, (2) progress monitoring (general outcome and content mastery), and (3) diagnostic. Screening measures are used with all students to identify who may be at risk for poor literacy outcomes. They provide strong technical data indicating student scores are reliable and valid and provide an overall reading or writing performance indicator. Screening measures typically have a “cut point” for risk that is predictive of future literacy performance and serve as a starting point for either confirming or disconfirming risk.<sup>2</sup> If risk has been confirmed and the skills have been prioritized for intervention (e.g., decoding, language comprehension or both), then teachers make the decision to provide intervention supports for these students. Placement tests within the intervention platform are used to further specify the focus of intervention instruction. Within an MTSS framework, screening measures are commonly referred to as “universal screeners” and are an essential component that is used within Tier 1.<sup>3</sup>

Progress monitoring measures are administered to students who have been confirmed to be at-risk and have been subsequently placed into intervention supports accessible within the high-quality intervention platform. The goal of progress monitoring is to determine the effectiveness of intervention by evaluating student growth. Student growth is measured frequently (e.g., weekly) and graphed against time to determine the rate of learning that has occurred during intervention instruction. There are two different forms of progress monitoring data: (1) general outcome data, and (2) content mastery data.<sup>4</sup> Using both forms of progress monitoring data allows for more robust analysis of students’ intervention response to address the needs of students with severe and persistent reading and writing difficulties.

Progress monitoring measures that provide general outcome data have standardized administration and scoring protocols and, are sensitive to detect learning improvements more quickly than other types of teacher-created formative assessments. Additionally, the focus

of general outcome measures is long-term (e.g., end of year outcome) so the methods for testing and the contents of the assessments remain consistent for each assessment probe. This means there are multiple assessment probes used to measure progress that have all been thoroughly validated and demonstrated to have equal levels of difficulty, so progress monitoring can be done regularly.<sup>5</sup>

Content mastery forms of progress monitoring provide information about students’ understanding of a carefully sequenced, hierarchy of skills (from easy to complex) that are taught in the intervention programs. Interventions that have considerable evidence demonstrating positive outcomes for students with targeted or severe and persistent reading or writing needs typically supply content mastery measures that are administered approximately once per week (e.g., every five lessons). This type of data is helpful to the interventionist because it yields precise information about the student’s responsiveness to the intervention and will inform the types of instructional adaptations necessary to improve mastery.

Diagnostic assessments are administered when additional information is needed to better define a student’s strengths and needs. The term “diagnostic” should not be confused with identifying a student with a specific disability. Instead, diagnostic assessments would be administered if more in-depth analysis of progress monitoring data are insufficient to inform how to intensify the intervention instruction. It is important to keep in mind diagnostic assessments are not required for all students – only select students who may not be responding to the intervention based on progress monitoring and content mastery data.

There are a variety of diagnostic assessments available. These range from informal, easy to access, and easy to administer assessments to more standardized, norm-referenced assessments that would require more time and training to administer and interpret. Standardized diagnostic assessments would be used for students who are repeatedly not responding as expected to increasingly intensive adaptations to the interventions. Regardless of whether the diagnostic assessments are informal or standardized, they tend to require more resources to administer, analyze, and apply to inform increasingly intensive adaptations to the intervention supports. For this reason, some test developers provide guidance for ways in which progress monitoring data can be used in a diagnostic fashion so that more costly alternatives might be avoided. Test developers may also include guidance about the type of student profile that requires diagnostic assessments be administered.

Using data to make the best decisions possible for students requires district leaders to utilize a high-quality review, selection, and de-selection process for assessments, just like what is needed to design a district’s Intervention Platform. The data will be used to confirm or disconfirm risk, to determine the degree to which a student is responding to intervention, inform how successful the adaptations to interventions are at accelerating student outcomes,

and to consider the need for referring a student for special education services. The accuracy in which these decisions need to be made provides ample support for ensuring when possible, well-constructed, and technically sound assessment measures are prioritized for use. The National Implementation Research Network (NIRN) Hexagon Discussion and Analysis Tool can be drawn upon to conduct a high-quality review, selection and de-selection process for assessments. Special assessment considerations should be applied to three of the six factors of the Hexagon Tool. The assessment considerations for Evidence, Supports and Fit include:

- **Evidence:**
  - Validity data reports for all assessment subtests
  - Reliability (.80 or higher for inter-rater, test-retest, coefficient alpha)
  - Predictive Validity (for screening assessments) (.40 or higher for correlations)
  - Area Under the Curve (for screening assessments) (.80 or higher for correlations)
  - Cut-scores are paired with specific percentile ranks or chances of meeting future reading or writing goals
  - Normed using a nationally representative sample
- **Resources to Support Implementation:**
  - Target audience for the assessment including populations/types of students that would be excluded from the assessment
  - Frequency for administering the assessment
  - Assessment administration format (e.g., whole group, one-to-one, paper/pencil, computer administered, multiple choice)
  - Technology needed to support the data collection and analysis
  - Preparation time needed for assessment materials and set-up
- **Fit:**
  - Other comparable assessments currently available within the district that measure the skills/concepts the proposed assessment for review measures
  - Data that warrant the district consider reviewing additional assessments when other comparable assessments are currently available

- Adjustments to the district's current infrastructure within and across schools to administer and score the assessments (e.g., changes to assessment schedules, technology use)

Assessment review guidance is also available to assist districts in being good consumers of screening and progress monitoring assessments. For example, the National Center for Intensive Intervention (NCII) has organized high-quality review information for academic and behavioral assessment tools. District leaders will still need to consider implementation costs, available resources and additional resources needed for implementation prior to making assessment decisions. Given diagnostic assessments range from informal to formal, it may not be possible to always select a diagnostic assessment that has technical rigor. Instead, it is important for districts to know the types of diagnostic assessments available and what skills they are written to assess. NCII also provides examples of common and published diagnostic tools. Unlike the information included in their Academic and Behavioral Tools Charts, the diagnostic tools have not been reviewed by the NCII Technical Review Committee.

## Adaptations to Increase the Instructional Intensity of the Intervention<sup>1</sup>

### *Teachers and interventionists primarily need to understand and act upon this practice.*

A multi-disciplinary team, (e.g., Student Support Team, IEP Team), which includes a student's teachers and other staff with a variety of expertise, is responsible for designing and refining Individualized Intensive Intervention Plans for all students requiring intensive support, including some students with educational disabilities. For students with disabilities, this plan should supplement, but not replace the annual Individualized Education Program (IEP). The multi-disciplinary team would review the following information when considering adaptations to the intervention to increase the instructional intensity of Intervention Plans:

- Fidelity, or the extent to which the intervention was implemented as intended (e.g., a standard treatment protocol was applied for delivering intervention instruction)
- Students' attendance in intervention lessons
- Interventionist's careful observations of the student's verbal and non-verbal behaviors during instruction (e.g., correct/incorrect responses, level of participation, motivation, attention, persistence)
- Data analysis for instruction (trends in general outcome measurement progress monitoring data and mastery measurement progress monitoring data, diagnostic data)
- Plausible reason(s) why the student is having difficulty based on the data analyzed

It is also helpful for interventionists to have access to intervention platform review documentation noting which dimensions (aspects) of intervention intensity the intervention was lacking. This allows the instructor to proactively consider how to strengthen those dimensions if an analysis of progress monitoring, content mastery and other diagnostic data (e.g., student observations and in-depth analyses of progress monitoring data) indicates a need for an adaptation. For example, if a 6th-grade student is placed in a comprehension intervention and the review, selection process indicated that the "attention to transfer" dimension could have been stronger (limited opportunities for students to apply what they are learning to other types of texts or classes), then the interventionist can be better prepared to act on data such as when observations indicate that the student is successful in applying the strategy during intervention instruction but does not seem able to apply the strategies learned to fictional text or to understand the contents of text used in classroom settings.

To intensify instruction, multi-disciplinary teams carefully titrate each of the dimensions of intervention intensity (except strength)<sup>2</sup> to design evidence-based intervention adaptations. Each dimension, as applied to increasingly intensive instructional adaptations, is briefly defined below.

- **Alignment:** Teacher determines the ways in which the intervention currently being used matches the student's needs and how the intervention could be adjusted (either supplemented or modified) to address unmet needs as indicated by data. For example, the content focus of the intervention currently being used could still match the student's primary needs; however, additional data may have emerged that suggests more opportunities to practice word level and fluency level activities are needed. Thus, the teacher adapts the intervention to provide additional practice opportunities documenting student's response and continuing to refine and adapt using progress monitoring data to guide decision-making. With another student, comprehension has been the primary need; however, the student's fluency scores have plateaued over the last six to seven weeks of instruction. The teacher adapts the intervention, so it also includes a fluency building component, monitors student progress, and adjusts instruction as needed.
- **Dosage:** Teacher looks for increased opportunities for the student to respond and receive affirmative and informative feedback (information to students about their responses). Increasing opportunities for students to respond and to receive feedback can be accomplished by adapting the intervention in two ways: (1) lesson design dosage adaptations; (2) structural dosage adaptations.
  1. Lesson design dosage adaptations: Teacher can increase the number of practice opportunities accessible to the student within the lesson and ensure immediate feedback is provided to remedy misunderstandings (e.g., increase the number of chances a student can read and answer questions, reduce the amount of teacher talk)
  2. Structural dosage adaptations:
    - Increase the number of intervention sessions
    - Increase the number of instructional minutes by adding time to the intervention session
    - Reduce the number of students participating in the intervention group
    - Increase the ratio of adults to students (e.g., paraeducator is with the teacher during the intervention instruction and able to assist the teacher in monitoring practice opportunities)

- **Comprehensiveness (elements of explicit instruction):** Teacher incorporates additional elements of explicit instruction that would help address the reasons for the student's non-responsiveness to the intervention. The elements of explicit instruction the teacher considers adding include:
  - Use clearer, more concise, simpler instructional language
  - Provide an additional modeling of strategies to arrive at a correct answer
  - Develop more background knowledge
  - Provide more practice opportunities that are paired with immediate affirmative and affirmative feedback
  - Improve the gradual fading of instructional supports
  - Provide sufficient independent practice that is also paired with immediate affirmative and affirmative feedback
  - Plan for distributed cumulative review
- **Attention to transfer:**<sup>2</sup> Teacher embeds opportunities for the student to make connections between mastered and related skills and apply the strategies taught in the intervention to additional contexts. For example, additional interventionist teacher observation data and classroom teacher data indicate the student is not applying the strategies that are successfully used during intervention to other contexts. The interventionist will adapt the intervention to incorporate the types of words, text, etc. that are being used in the student's classroom(s) into the lessons. The interventionist will also provide the classroom teacher(s) with ways to model and/or prompt the use of the intervention strategy, so the student sees the applicability of the strategy in the classroom settings.
- **Behavioral support:**<sup>3</sup> Teacher incorporates additional behavioral supports into the intervention program and addresses things like the organization and physical lay-out of the classroom environment to increase students' motivation, engagement, and overall success in the intervention instruction. The behavioral support adaptations could include:
  - **Mechanisms to adjust the organization and physical environment of the classroom setting.** For example, the teacher adjusts students' seating in such a way to increase monitoring and feedback during the intervention lesson. It is important for the student to be in the teacher's direct line of vision and closer in proximity so the teacher can easily observe and hear the student's responses during practice

opportunities. This allows the teacher to provide more immediate affirmative and informative feedback to the student.

- **Strategies to help the student persist in completing the tasks and activities within lessons.** For example, a student questions the tasks within the intervention lesson and criticizes herself for not being able to easily do what is being asked. To address the lesson criticisms, the teacher sets a goal with the student to incorporate more positive statements about the lesson activities. To address the personal criticism, the teacher also incorporates strategies to teach the student how to positively attribute successes to the amount of work and practice the student has done to learn the information. Together, the student and teacher will monitor the student's progress. Affirmations for incremental gains will be celebrated as well as achieving the goals.
- **Methods to promote students' self-monitoring of engagement in the lessons.** For example, the teacher works with the student to define behaviors that constitute engagement in the lesson with examples and non-examples. The student monitors and records his behavior (teacher will also record). In preparation for this, the teacher and student agree on how to discretely cue the student to record his level of engagement. They also develop a goal for increased engagement. The teacher and student compare results to determine if this behavior support is effective in helping the student achieve his goal.
- **Methods to reduce off-task behavior.** A solid classroom foundation must exist for preventing and reducing off-task behavior. This means the intervention teacher clearly defines behavioral expectations for class-appropriate behaviors. Students are taught the expectations with the use of examples and non-examples. The teacher designs a way to affirm students who are demonstrating the class-appropriate behaviors and does so by frequently monitoring. Students are also proactively aware of the continuum of consequences. Off-task behaviors during intervention are more likely to occur because students in intervention tend to have a low perceived probability of success. Additional behavioral supports like goal setting and collecting data on the frequency, intensity, and duration of off-task behaviors will help teachers and other school or district staff with behavioral expertise to more precisely define additional behavioral supports that should be incorporated into the intervention instruction. Those supports could include pre-correcting behaviors and cueing when they begin to occur, providing the student with a replacement behavior, designing a structured reinforcement system, defining limits, and establishing individualized consequences.

## Infrastructures to Support Students with Severe and Persistent Literacy Needs<sup>1</sup>

### *Leaders primarily need to understand and act upon this practice.*

“Infrastructures” in the context of this guide refer to the district and school mechanisms (e.g., standardization of processes, selection of resources) for using evidence-based practices in ways that will result in meaningful literacy outcomes for students with severe and persistent literacy needs. These mechanisms help to ensure that the intervention supports being provided are efficient and effective. For this reason, infrastructure development is one of the five practices for intensifying literacy instruction.

Districts should consider establishing an “implementation infrastructure” to standardize the literacy and behavioral components of an MTSS framework, while still allowing for much needed differentiation in these infrastructures across early elementary, elementary and secondary settings. Well-established and functional infrastructure establishes the conditions for high-quality, scalable, and sustainable MTSS efforts. Information about a district implementation infrastructure can be found by accessing the District Capacity Assessment.<sup>2</sup> One example of a component of an implementation infrastructure is establishing a district process for consistently reviewing, selecting, and de-selecting educational innovations (e.g., intervention curriculum resources, screening assessments, progress monitoring assessments). Another example includes districts establishing processes for quickly identifying and removing barriers impeding the schools’ efforts to implement high-quality literacy instruction and intervention supports. A district implementation infrastructure in support of accelerating literacy outcomes requires delineating district and school-level decisions that are associated with intensive intervention.

Decisions that should be made by district leaders to increase the quality and consistency amongst schools in how students are identified and supported in receiving increasingly intensive intervention include:

- Reviewing, selecting, and de-selecting interventions that will be included in the schools’ Intervention Platforms
- Reviewing, selecting, and de-selecting screening, progress monitoring, and diagnostic assessments
- Establishing processes to ensure accurate and timely data collection (screening, progress monitoring, diagnostic) and analysis across levels (district, school, grade, individual student)

- Developing and implementing processes to quickly and accurately place students into intervention (e.g., sequence of assessment data used to match students to specific interventions within the intervention platform)
- Standardizing forms/paperwork that will be used to document critical plans and decisions to improve school-wide literacy outcomes, grade-level literacy needs including student groupings for differentiated learning, and individualized intensive intervention supports (including documentation of adaptations)
- Ensuring interventionists have high-quality, on-going professional learning and coaching supports to successfully use the interventions and to adapt the instruction that is documented in an Individualized Intensive Intervention Plan.
- Developing guidelines and methods used for monitoring intervention fidelity and for monitoring the implementation of Individualized Intensive Intervention Plans
- Establishing teaming structures within schools that are responsible for:
  - Maintaining the focus on quality Tier 1 literacy efforts
  - Designing and maintaining the school’s intervention infrastructure that allows equitable access to effective intervention supports
  - Facilitating high-quality individual student data analysis (e.g., Data-Based Individualization) to develop and continuously improve Individualized Intensive Intervention Plans
  - Determining special education eligibility and ensuring that all students with disabilities have the opportunity to participate equitably in increasingly intense levels of intervention as indicated by progress monitoring data and in alignment with their Individualized Education Plans.

Decisions that should be made by school leaders to appropriately contextualize the district's intervention supports accessible to students include:

- Specific dates, within district-determined timelines, for when data will be collected and analyzed to determine which students would benefit from intervention supports (e.g., timelines for secondary schools to gather information about incoming students prior to scheduling classes for the upcoming school year, timelines for assessing students new to the district)
- Staff responsible for intervention assignment and grouping decisions
- Professional learning and coaching supports necessary for intervention staff
- Methods that will be used to monitor intervention fidelity and Individualized Intensive Intervention Plans
- Team composition to address the responsibilities associated with the literacy and behavioral components of an MTSS framework (Tier 1, intervention access, individual student data analysis meetings) which could include two teams: one to address Tier 1 and intervention access responsibilities and another to address the individual student data analysis responsibilities
- Specific data analysis dates, within district-determined timelines, for on-going problem-solving with school-wide teams (includes school leadership teams and department teams) and grade-level, cross-department teams.

Developing district infrastructures to support the schools to effectively address the continuum of literacy needs is important; however, it is not a sequential process. Meaning, schools can either begin to develop and refine their own implementation infrastructures at the same time as the district's efforts or start before the district begins to engage in the work. There are supporting infrastructures that need to be built around the data (e.g., collection, analysis, use) and the educational practices used across classrooms, including intervention classes and classes for students with disabilities. Information about the necessary components of a school's implementation infrastructure can be found by accessing the elementary and secondary editions of the Reading Tiered Fidelity Inventory.<sup>3</sup>

One example of a school implementation infrastructure to support students who have instructional needs beyond those in the classroom is the process by which students are identified for and provided with specific intervention supports. This requires a significant amount of coordination with other staff (e.g., classroom teachers, counselor responsible for designing student schedules, interventionists) and could impact things like the school's schedule for electives (e.g., music, physical education class) and efforts to coordinate

literacy instruction across grade levels. Another school infrastructure example is forming a multidisciplinary team to discuss how to support students with persistent and severe academic and behavioral needs. This team is carefully selected by the principal for their skill sets, roles, and ability to fulfill the team's responsibilities. The meetings have a clearly defined purpose. Its members have clearly defined meeting roles, follow a consistent format for data analysis, and use a standardized set of materials to gather information about student needs to document Individualized Intensive Intervention Plans. The team applies decision rules to determine when intervention adaptations need to occur. Although these are not the only infrastructures needed within schools, they were highlighted to help leaders, teachers, and interventionists understand what is meant by infrastructures to support students who would benefit from increasingly intensive intervention.

## Considerations for Understanding How Students' Learning and Behavior are Enhanced: Motivation and Engagement

We highlight motivation and engagement as one of the processes that contributes significantly to improving students' learning and behavior. There is growing research evidence to support students' motivation accounting for "unique variance in predicting reading performance beyond what has been explained by academic and cognitive skills...however, motivation does not necessarily promote reading achievement absent of existing reading skills."<sup>1</sup> What this means is motivation and engagement can accelerate reading and writing performance; however, motivation is directly linked to student success. Thus, educators can directly impact students' motivation by considering ways to engage them in the reading and writing process. This can include effectively implementing the five practices previously described.

Motivated students tend to read more outside of school and tend to be good readers. This is one reason why it is challenging to infer students read more simply because of their motivation to do so. Therefore, it is important to keep in mind students' inability to read and write well impacts their desire to read and to write, and their overall engagement in literacy-related activities. While it is important to increase students' motivation and engagement to read and write; students with severe and persistent learning needs, especially those with disabilities, are likely to need highly structured and supportive instruction to enhance their reading and writing skills as a mechanism for enhancing their motivation and engagement in reading and writing. This is supported by research that suggests integrating strategies to enhance student motivation into intervention will further increase student performance over time.<sup>2</sup>

Motivation and engagement strategies should be considered as one aspect of a specially designed, Individualized Intensive Intervention Plan. In this document, they were explained as an adaptation to the "behavioral supports" intervention intensity dimension. This would enhance student motivation and engagement as a mechanism to improve their responsiveness to high-quality intervention instruction. The instruction is the most critical part, but motivation is malleable and beneficial to learning.

## Summary

This document is meant to represent a blueprint for schools and districts to use when designing and implementing evidence-based practices to intensify reading and writing instruction. Its intended audience is leaders (district and school), teachers, interventionists, pre-service teachers, content experts/specialists, and teacher preparation faculty. The five practices are sequenced in such a way as to focus attention first on the skills needed to become a successful reader and writer and then to expand upon the supports needed in order to successfully develop those skills.

Although this document is written for a broad audience and its contents are relevant for all audiences outlined above, there are primary individuals who would be responsible for enacting the contents of each essential practice. Teachers and interventionists primarily need to understand and act upon Practice 1: "Knowledge and Use of a Learning Progression for Developing Skilled Readers and Writers" and Practice 4: "Adaptations to Increase the Instructional Intensity of the Intervention." Leaders primarily need to understand and act upon Practice 2: "Design and Use of an Intervention platform" and Practice 5: "Infrastructures to Support Students with Severe and Persistent Literacy Needs." All stakeholders, including teachers, interventionists, and leaders, need to understand the three assessment types outlined in Practice 3: "On-going Data-Based Decision Making for Providing and Intensifying Interventions."



## Practice 1

- 1 Popham, J. W. (2007). The lowdown on learning progressions. *Educational Leadership*, 64(7), 83-84
- 2 Carnine, D. W., Jerry, S., Kame' enui, E. J., Slocum, T. A., & Travers, P. A. (2017). *Direct instruction reading* (6th ed.). Boston: Pearson
- 3 Gough, P., & Tunmer, W., (1986), Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10.; Hoover W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing*, 2, 127-160
- 4 Berninger, V. W., & Amtmann, D. (2003). Preventing written expression disabilities through early and continuing assessment and intervention for handwriting and/or spelling problems: Research into practice. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (p. 345–363). The Guilford Press; Berninger, V.W. & Chanquoy, Lucile. (2012). What writing is and how it changes across early and middle childhood development: A multidisciplinary perspective. *Writing: A mosaic of perspectives*. 65-84; Berninger, V. W., Vaughn, K., Abbott, R. D., Begay, K., Coleman, K. B., Curtin, G., et al. (2002). Teaching spelling and composition alone and together: Implications for the simple view of writing. *Journal of Educational Psychology*, 94(2), 291-304; Moats, L. C., Tolman, C., A. (2019). *LETRS 3<sup>rd</sup> Edition*. Dallas, TX.: Voyager Sopris Learning
- 5 Shanahan, T. (2019). Reading-writing connections. In S. Graham, C. A. MacArthur & M. Hebert (Eds.), *Best practices in writing instruction* (pp. 309-332)
- 6 Graham, S., Harris, K. R. (2019). Evidence-based practices in writing. In S. Graham, C. A. MacArthur & M. Hebert (Eds.), *Best practices in writing instruction* (pp. 3-28)
- 7 Graham, S., Harris, K. R. (2019). Evidence-based practices in writing. In S. Graham, C. A. MacArthur & M. Hebert (Eds.), *Best practices in writing instruction* (pp. 3-28)
- 8 Moats, L. C., Tolman, C., A. (2019). *LETRS 3<sup>rd</sup> Edition*. Dallas, TX.: Voyager Sopris Learning
- 9 Gough, P., & Tunmer, W., (1986), Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10.; Hoover W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing*, 2, 127-160

- 10 Berninger, V. W., & Amtmann, D. (2003). Preventing written expression disabilities through early and continuing assessment and intervention for handwriting and/or spelling problems: Research into practice. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (p. 345–363). The Guilford Press; Berninger, V.W. & Chanquoy, Lucile. (2012). What writing is and how it changes across early and middle childhood development: A multidisciplinary perspective. *Writing: A mosaic of perspectives*. 65-84; Berninger, V. W., Vaughn, K., Abbott, R. D., Begay, K., Coleman, K. B., Curtin, G., et al. (2002). Teaching spelling and composition alone and together: Implications for the simple view of writing. *Journal of Educational Psychology*, 94(2), 291-304; Moats, L. C., Tolman, C., A. (2019). *LETRS 3<sup>rd</sup> Edition*. Dallas, TX.: Voyager Sopris Learning
- 11 Bellocchi, S., Tobia, V., & Bonifacci, P. (2017). Predictors of reading and comprehension abilities in bilingual and monolingual children: A longitudinal study on a transparent language. *Reading and Writing: An Interdisciplinary Journal*, 30(6), 1311–1334. <https://doi.org/10.1007/s11145-017-9725-5>; Catts, H. W., Herrera, S., Nielsen, D. C., & Bridges, M. S. (2015). Early prediction of reading comprehension within the simple view framework. *Reading and Writing*, 28(9), 1407–1425. doi: 10.1007/s11145-015-9576-x; Nation, K. (2019). Children's reading difficulties, language, and reflections on the simple view of reading. *Australian Journal of Learning Difficulties*, 24(1), 47–73. doi: 10.1080/19404158.2019.1609272
- 12 Gough, P., Hoover, W., & Peterson, C. (1996). Some observations on a simple view of reading. In C. Cornoldi & J. Oakhill (Eds.), *Reading comprehension difficulties* (p. 1-13). Mahwah, NJ: Lawrence Erlbaum; Gough, P., & Tunmer, W., (1986), Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10.; Hoover W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing*, 2, 127-160
- 13 Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Washington, DC: National Center for Educational Evaluation and Regional Assistance (NCEE), Institute of Educational Sciences, U.S. Department of Education. Retrieved from the NCEE website: <http://whatworks.ed.gov>
- 14 Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken: Wiley

- 15 Moats, L. C., Tolman, C., A. (2019). *LETRS 3<sup>rd</sup> Edition*. Dallas, TX.: Voyager Sopris Learning
- 16 Berninger, V. W., & Amtmann, D. (2003). Preventing written expression disabilities through early and continuing assessment and intervention for handwriting and/or spelling problems: Research into practice. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (p. 345–363). The Guilford Press; Berninger, V.W. & Chanquoy, Lucile. (2012). What writing is and how it changes across early and middle childhood development: A multidisciplinary perspective. *Writing: A mosaic of perspectives*. 65-84; Berninger, V. W., Vaughn, K., Abbott, R. D., Begay, K., Coleman, K. B., Curtin, G., et al. (2002). Teaching spelling and composition alone and together: Implications for the simple view of writing. *Journal of Educational Psychology*, 94(2), 291-304; Moats, L. C., Tolman, C., A. (2019). *LETRS 3<sup>rd</sup> Edition*. Dallas, TX.: Voyager Sopris Learning
- 17 Berninger, V. W., & Swanson, H. L. (1994). Modifying Hayes and Flower’s model of skilled writing to explain beginning and developing writing. In E. Butterfield (Ed.), *Children’s writing: Toward a process theory of the development of skilled writing* (p. 57-81). Greenwich, CT: JAI Press
- 18 Alamargot, D., & Fayol, M. (2009). Modeling in the development of written composition. In R. Beard, D. Myhill, M. Nystrand, & J. Riley (Eds), *Handbook of writing development* (p. 23-47). London: Sage
- 19 Graham, S., Bollinger, A., Booth Olson, C., D’Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide* (NCEE 2012-4058). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from [http://ies.ed.gov/ncee/wwc/publications\\_reviews.aspx#pubsearch](http://ies.ed.gov/ncee/wwc/publications_reviews.aspx#pubsearch)
- 20 Graham, S., Bollinger, A., Booth Olson, C., D’Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide* (NCEE 2012-4058) (p. 6). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from [http://ies.ed.gov/ncee/wwc/publications\\_reviews.aspx#pubsearch](http://ies.ed.gov/ncee/wwc/publications_reviews.aspx#pubsearch)

## Practice 2

---

- 1 Vaughn, S. (n.d.). video. Retrieved November, 27, 2019, from <https://intensiveintervention.org/resource/what-intervention-platform>
- 2 Metz, A. & Louison, L. (2018) The Hexagon Tool: Exploring Context. Chapel Hill, NC: National Implementation Research Network, Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill. Based on Kiser, Zabel, Zachik, & Smith (2007) and Blase, Kiser & Van Dyke (2013)
- 3 Fuchs, L. S., Fuchs, D., Malone, A. (2017). The taxonomy of intervention intensity. *Teaching Exceptional Children*, 50(1), 35-43
- 4 Academic Intervention Tools Chart. (n.d.). Retrieved February 9, 2020, from <https://charts.intensiveintervention.org/chart/instructional-intervention-tools>
- 5 WWC: Find What Works! (n.d.). Retrieved February 11, 2020, from <https://ies.ed.gov/ncee/wwc/>
- 6 Best Evidence Encyclopedia -- Empowering Educators with Evidence on Proven Programs. (n.d.). Retrieved February 11, 2020, from <http://www.bestevidence.org/>

## Practice 3

---

- 1 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 intervention 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 <https://ies.ed.gov/ncee/wwc/PracticeGuide/3>; Fuchs, L.S., & Fuchs, D. (2007a). *Progress monitoring in the context of response-to-intervention*. Washington, DC: Office of Special Education Programs, U.S. Department of Education; Fuchs, L. S., & Fuchs, D. (2007b). *Using CBM for progress monitoring in reading*. Washington, DC: Office of Special Education Programs, U.S. Department of Education

- 2 Hosp, M. K., Hosp, J. L., & Howell, K. W. (2016). *The ABCs of CBM: A practical guide to curriculum-based measurement (2<sup>nd</sup> ed.)*. New York: Guilford Press; Fuchs, D., Fuchs, L. S., Compton, D. L., (2004). Identifying reading disabilities by responsiveness-to-teaching: *Specifying measures and criteria. Learning Disability Quarterly, (27)4*, doi: <https://doi.org/10.2307/1593674>
- 3 McIntosh, K., Goodman, S. (2016). *Integrated multi-tiered systems of support: Blending RTI and PBIS*. New York, Guilford Press
- 4 Pentimonti, J. M., Fuchs, L. S., Gandhi, A. G. (2019). Issues of assessment within intensive intervention. In R. Zumeta Edmonds, A. Gruner Gandhi, & L. Danielson (Eds.), *Essentials of intensive intervention*. New York, NY: The Guilford Press
- 5 Pentimonti, J. M., Fuchs, L. S., Gandhi, A. G. (2019). Issues of assessment within intensive intervention. In R. Zumeta Edmonds, A. Gruner Gandhi, & L. Danielson (Eds.), *Essentials of intensive intervention*. New York, NY: The Guilford Press

#### Practice 4

- 1 Murray, C. S., Coleman, M. A., Vaughn, S., Wanzek, J., & Roberts, G. (2012). *Designing and delivering intensive interventions: A teacher's toolkit*. Portsmouth, NH: RMC Research Corporation; Carnine, D. W., Silbert, J., Kame'enui, E. J., Tarver, S. G. (2010). *Direct Instruction Reading (5<sup>th</sup> ed.)*. New York: Guilford Press; 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 intervention 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 <https://ies.ed.gov/ncee/wwc/PracticeGuide/3>
- 2 Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlett, C. L., Owen, R., Janeck, D. (2003). Explicitly teaching to transfer: Effects on third-grade students' mathematical problem-solving. *Journal of Educational Psychology, 95*, 293-304

- 3 Busacca, M.L., Anderson, A., Moore, D.W. (2015). Self-management for primary students demonstrating problem behavior in regular classrooms: Evidence review of single-case design research. *Journal of Behavioral Education, 24*, 373-401; Carter, E.W., Lane, K.L., Crnobori, M. Bruhn, A. L., & Oakes, W. P. (2011). Self-determination interventions for students with and at risk of emotional and behavioral disorders: Mapping the knowledge base. *Behavioral Disorders, 36(2)*, 100-116; MaConroy, M. A., Sutherland, K. S. Snyder, A. L., Marsh, S. (2008). Classwide interventions: Effective Instruction Makes a Difference. *Teaching Exceptional Children, 40(6)*. 24-30; Davies, S. Witte, R. (2000). Self-management and peer-monitoring within a group contingency to decrease uncontrolled verbalizations of children with attention deficit/hyperactivity disorder. *Psychology in the Schools, 37(2)*, 135-147; Gage, N.A., Scott, T.M., Hirn, R., & MacSuga-Gage, A.S. (2018). The relationship between teachers' implementation of classroom management practices and student behavior in elementary school. *Behavior Disorders, 43(2)*, 302-315; Harris, K.R., Friedlander, B.D., Saddler, B., Frizzelle, R. & Graham, S. (2005). Self-monitoring of attention versus self-monitoring of academic performance: Effects among students with ADHD in the General Education Classroom. *The Journal of Special Education, 39(3)*, 145-156; Moore, D. W., Anderson, A., Glassenbury, M., Lang, R. & Didden, R. (2013). Increasing on-task behavior in a regular classroom: Effectiveness of a self-management procedure. Using a tactile prompt. *Journal of Behavior Education, 22*, 302-311; Myers, D., Freeman, J. Simonsen, B., & Sugai, G. (2017). Classroom management with exceptional learners. *Teaching Exceptional Children, 49(4)*, 223-230; Simonsen, B., Fairbanks, S. Briesch, A., Myers, D. & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children, 31(3)*. 351-380; Scott, T. M., Alter, P.J., & Hirn, R.G. (2011). An examination of typical classroom context and instruction for students with and without behavioral disorders. *Education and Treatment of Children, 34(4)*. 619-641

## Practice 5

---

- 1 Vanderheyden, Amanda & Tilly, William. (2016). Keeping RtI on Track: How to Identify, Repair, and Prevent Mistakes that Derail Implementation. LRP Publications; McIntosh, K., Goodman, S. (2016). *Integrated multi-tiered systems of support: Blending RTI and PBIS*. New York, Guilford Press; Burns, M. K., Riley-Tillman, T. C., & VanDerHeyden, A. M., (2012). *RTI applications: Vol. 1. Academic and behavioral interventions*. New York: Guilford Press; Murray, C. S., Coleman, M. A., Vaughn, S., Wanzek, J., & Roberts, G. (2012). *Designing and delivering intensive interventions: A teacher's toolkit*. Portsmouth, NH: RMC Research Corporation; Fixsen, D. L., Naoom, S. F., Blasé, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: Synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network (FMHI Publication #231)
- 2 Ward, C., St. Martin, K., Horner, R., Duda, M., Ingram-West, K., Tedesco, M., Putnam, D., Buenrostro, M., & Chaparro, E. (2015). District Capacity Assessment. National Implementation Research Network, University of North Carolina at Chapel Hill
- 3 St. Martin, K., Nantais, M., Harms, A., & Huth, E. (2015). *Reading Tiered Fidelity Inventory (Elementary-Level Edition)*. Michigan Department of Education, Michigan's Integrated Behavior and Learning Support Initiative; St. Martin, K., Nantais, M., & Harms, A. (2015). *Reading Tiered Fidelity Inventory (Secondary- Level Edition)*. Michigan Department of Education, Michigan's Integrated Behavior and Learning Support Initiative.

## Considerations for Understanding How Students' Learning and Behavior are Enhanced: Motivation and Engagement

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- 1 Toste, J. R., Didion, L., Peng, P., Filderman, M. J., & McClelland, A. M. (2020). A meta-analytic review of the relations between motivation and reading achievement for K-12 students. *Review of Educational Research*, (p. 3)
- 2 Toste, J. R., Didion, L., Peng, P., Filderman, M. J., & McClelland, A. M. (2020). A meta-analytic review of the relations between motivation and reading achievement for K-12 students. *Review of Educational Research*

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printcenter@kresa.org  
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