

DYSLEXIA SCREENING AND THE USE OF ACADIENCE READING K-6

Acadience Learning Inc. | January 2022



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INTRODUCTION

What Is Dyslexia?

Dyslexia is a learning disorder characterized by significant difficulty with skills involved in accurate and fluent reading and spelling. While there is no single definition of dyslexia that is used universally, educators, researchers, and policy makers generally agree that the defining characteristic of dyslexia is a severe deficit in word reading. There is also general agreement that, to be diagnosed with dyslexia, children must have adequate vision and hearing acuity along with adequate cognitive skills to be able to learn to read (Elliot, 2020; International Dyslexia Association, 2002).

Increasingly, experts in the field of reading research point to multifactorial models of dyslexia, wherein risk factors interact with protective factors and the risk of dyslexia is increased or reduced (Catts & Petscher, 2018; Pennington et.al., 2012). There is, in fact, evidence to suggest that risk for dyslexia may be reduced through early identification and intervention on the essential early literacy and reading skills (e.g, Foorman & Torgesen, 2001; O'Connor, Harty, & Fulmer, 2005). In prevention models, effective instruction of essential skills becomes a critical protective factor.

Consistent with the definition of the International Dyslexia Association® and current research within a prevention-oriented framework, dyslexia, then, is a significant and persistent difficulty with the skills involved in accurate and fluent reading despite having adequate cognitive and perceptual skills to learn to read and in the face of effective reading instruction.

Indicators and Features of Dyslexia

According to most definitions of and research on dyslexia, the core difficulties exhibited by individuals with dyslexia are word recognition and spelling. (Catts & Hogan, 2021; Elliot 2020; Wagner et.al., 2019) Within a prevention-oriented framework, the impact that dyslexia has on readers is variable depending on the severity of the reading disability and the effectiveness of instruction or intervention received. Thus, the manifestation of dyslexia as a reading disability results from a combination of (1) difficulty with the essential early literacy and reading skills involved in accurate and fluent word reading and (2) a sustained lack of adequate progress in learning the essential early literacy and reading skills (3) when provided with generally effective instruction.

Essential early literacy and reading skills include phonological processing and phonemic awareness, phonics skills and understanding of the alphabetic principle, word reading and decoding, accuracy and fluency reading connected text, and comprehension. Other factors associated with risk for dyslexia include difficulties with word retrieval as assessed by measures of Rapid Automatized Naming (RAN), spelling, oral language, and/or a family history of reading difficulties (e.g., Carroll, Mundy, & Cunningham, 2014; Catts, Adlof, Hogan, & Weismer, 2005; Norton & Wolf, 2020).

It is important to note that the essential early literacy and reading skills and the associated risk factors are developmental in nature. That is, earlier skills provide a foundation for later skills which build on and integrate over time as students master them. For example, prior to formal reading instruction, early alphabetic knowledge, specifically fluency in naming letters, is exceptionally predictive of later reading difficulties along with early phonological awareness skills such as rhyming or identifying initial sounds in words. Through the kindergarten year and first grade years, phonemic awareness remains predictive and alphabetic knowledge moves beyond letter naming to basic phonics skills and an understanding of the alphabetic principle. By the end of first grade and beginning of second grade, accuracy and fluency in reading connected text becomes a strong predictor and remains a robust predictor throughout the school years.

Difficulties in acquiring the essential early literacy and reading skills contribute to, or directly result in, a number of negative consequences including academic failure and poor overall school performance and social-emotional and behavioral problems (Daniel et al., 2006; McArthur et al., 2020). Thus, it is critical to identify students at risk for reading disabilities, including dyslexia, as early as possible.

Importance of Early and Periodic Screening

Our definition of dyslexia implies that screening for reading disability including dyslexia occurs within a prevention-oriented, early-intervention model. We must identify students at risk for reading disabilities early, provide instructional support targeted to individual student needs, monitor student progress and response to instruction over time, make adjustments to instruction as needed to ensure adequate progress toward important early literacy and reading goals, and evaluate outcomes for individual students and at a systems level.

Within a prevention-oriented model, we conduct screening early and periodically. We screen early so that we can intervene early, when we have the greatest likelihood of preventing future difficulties and before reading problems become a greater challenge for intervention efforts. We conduct screening periodically across the school year because of the developmental nature of the acquisition of essential early literacy and reading skills. Periodic screening throughout the school year, not just at a single time point, enables us to check on the progress of students' acquisition of the critical skills over time. Periodic screening also allows us to evaluate the effectiveness of the instructional supports that are being provided both for individual students and at a systems level (e.g., school, district).

Screening practices therefore should be focused on essential early literacy and reading skills—phonemic awareness and phonics, word reading and decoding, and accurate and fluent reading of connected text, and comprehension—and should be conducted across the school year. Because a key indicator of dyslexia is significant and sustained difficulty in acquiring essential early literacy and reading skills *despite being provided generally effective instruction*, it's not enough to assess the student's skills, we must also evaluate the instruction the student is receiving.

Within a prevention-oriented model, we conduct screening early and periodically.



Overview: Acadience Reading Assessments for Dyslexia Screening

It is important to keep in mind that using a single test to make important high-stakes decisions like the diagnosis of dyslexia is inconsistent with professional standards (AERA, APA, & NCME, 2014). With that in mind, Acadience® Reading assessment suite provides a reliable, valid, and efficient method of identifying students who are at risk for reading difficulties, including dyslexia.

Acadience Reading provides quick and efficient assessments of the essential early literacy and reading skills from kindergarten through sixth grade. The Acadience® Reading K–6 assessment includes a series of brief measures designed to be administered for periodic screening three times a year (beginning, middle, end) as well as for more frequent progress monitoring of students identified as at risk and needing additional instructional support. In addition, Acadience® Reading Survey and Diagnostic assessments can be used to provide specific information to inform instruction for individual students as needed.

There are several important features of Acadience Reading K–6 measures that make them useful tools for identifying students at risk of dyslexia and other reading disabilities. These features are described below.

Assessment of essential early literacy and reading skills.

The first important feature of Acadience Reading K–6 that makes it useful for identifying students at risk for dyslexia is that Acadience Reading K–6 measures assess the essential early literacy and reading skills, that is, those skills that are known as the core component or foundational skills of reading. These skills include (a) phonemic awareness (i.e., the ability to hear and manipulate the individual sounds in words); (b) basic phonics and an understanding of the alphabetic principle that enables children to map print (letters) to speech (individual sounds) and blend those letter sounds to read words; (c) accuracy and fluency reading connected text, and (d) comprehension. Measures of Letter Naming Fluency (LNF) and Rapid Automated Naming (RAN) are included for students in grades K and 1 as additional indicators of risk.

Measures as indicators.

Another important feature of the measures is that they are, by design, *indicators* of each of the essential early literacy and reading skills. For example, Acadience Reading K–6 does not assess all possible basic phonics skills that are important to teach. Instead, the Acadience Reading measure of basic phonics, Nonsense Word Fluency (NWF), is designed to be an indicator of a student's progress toward the long-term outcome of having automaticity in applying knowledge of basic letter-sound correspondences to reading unknown words. The notion of Acadience Reading measures as indicators is a critical one. It is this feature that puts it in the class of assessments known as General Outcome Measures (more popularly known as CBMs) (Fuchs and Deno, 1991).

Table 1 provides an overview and brief description of each measure and the essential early literacy/reading skill of which the measure is an indicator.

TABLE 1: ACADIENCE READING K–6 MEASURES AND SKILL/RISK AREAS

Measure	Grades	Essential Early Literacy/ Reading Skill	Description
First Sound Fluency	K	Phonemic awareness	Assessor says a word; student says the first sound in the word.
Phoneme Segmentation Fluency	K, 1	Phonemic awareness	Assessor says a word; student says the sounds in the word.
Nonsense Word Fluency	K, 1, 2	Basic phonics and alphabetic principle	Student reads V-C and C-V-C nonsense words.
Oral Reading Fluency	1–6	Accuracy and fluency with connected text, advanced phonics, comprehension	Student reads a passage orally and tells about what was read.
Maze	3–6	Reading comprehension	Student reads a passage silently, selecting the correct word of three throughout the passage.
Letter Naming Fluency	K, 1	Indicator of risk	Student names letters arrayed on a page.
Rapid Automated Naming	K, 1	Indicator of risk	Student names an array of objects, letters, and/or numbers.

Note that some of the Acadience Reading K–6 measures are indicators of essential early literacy and reading skills, and others are added indicators of risk. The essential early literacy and reading skills are those that have evidence that they: a) are predictive of reading acquisition and reading achievement, b) can be taught, and c) result in improved reading outcomes when they are taught and learned. In contrast, Letter Naming Fluency (LNF) and Rapid Automated Naming (RAN) are included in Acadience Reading K–6 as indicators of risk, not as instructional targets. For young students, fluency in letter naming is one of the strongest and best predictors of later reading ability (Adams, 1990; National Early Literacy Panel, 2008; Piasta, Petscher, & Justice, 2012). LNF is used in identifying students who may need additional support but is not used as an instructional goal. While letter naming remains a robust predictor of later reading ability, it is letter sound knowledge paired with phonemic awareness that unlocks the key to the code—the alphabetic principle. Similarly, while RAN serves as a predictor of risk for reading difficulties and dyslexia, most researchers agree that providing students with instruction on a RAN task is not the optimal way to improve their word reading skill (Norton & Wolf, 2012).

Research-based benchmarks and cut points for risk.

Acadience Reading benchmarks and cut points for risk provide research-based levels of performance that can be used to predict risk of reading difficulties as students are acquiring early literacy skills in the early grades and to identify existing reading difficulties in later grades. Acadience Reading benchmarks are based on the predictive probability of a student achieving subsequent benchmarks and reading goals given a particular score on a measure and a point in time. Accordingly, a student’s performance on a measure at any point in time at any grade level may be above, at, below, or well below benchmark as depicted in Table 2. More information about Acadience Reading Benchmarks is available at <https://acadiencelarning.org/acadience-reading/k-grade6/>

TABLE 2: BENCHMARK LEVELS AND DESCRIPTORS

Likelihood of Meeting Later Reading Benchmarks	Benchmark Status	Benchmark Status Including Above Benchmark	What It Means
>99%	At or Above Benchmark overall likelihood of achieving subsequent early literacy benchmarks: 80% to 90%	Above Benchmark overall likelihood of achieving subsequent early literacy benchmarks: 90% to 99%	For students with scores in this range, the odds of achieving subsequent early literacy/reading benchmarks are very good. The higher above the benchmark, the better the odds.
95%			These students likely need effective core instruction to meet subsequent early literacy/reading goals. Some students may benefit from instruction on more advanced skills.
90%		At Benchmark overall likelihood of achieving subsequent early literacy benchmarks: 70% to 85%	For students with scores in this range, the odds are in favor of achieving subsequent early literacy/reading benchmarks. The higher above the benchmark, the better the odds.
80%			These students likely need effective core instruction to meet subsequent early literacy/reading benchmarks. Some students may require monitoring and strategic support on specific component skills as needed.
70%			
60%	Below Benchmark overall likelihood of achieving subsequent early literacy benchmarks: 40% to 60%	Below Benchmark overall likelihood of achieving subsequent early literacy benchmarks: 40% to 60%	For students with scores in this range, the overall odds of achieving subsequent early literacy/reading benchmarks are approximately even, and hard to predict. Within this range, the closer students' scores are to the benchmark, the better the odds; the closer students' scores are to the cut point, the lower the odds.
55%			These students likely need core instruction coupled with strategic support, targeted to their individual needs, to meet subsequent early literacy/reading benchmarks. For some students whose scores are close to the benchmark, effective core instruction may be sufficient; students whose scores are close to the cut point may require more intensive support.
50%			
45%			
40%			
30%	Well Below Benchmark overall likelihood of achieving subsequent early literacy benchmarks: 10% to 20%	Well Below Benchmark overall likelihood of achieving subsequent early literacy benchmarks: 10% to 20%	For students with scores in this range, the overall odds of achieving subsequent early literacy/reading benchmarks are low.
20%			These students likely need intensive support in addition to effective core instruction. They may also need support on prerequisite skills (i.e., below grade level) depending upon the grade level and how far below the benchmark their skills are.
10%			
<5%			

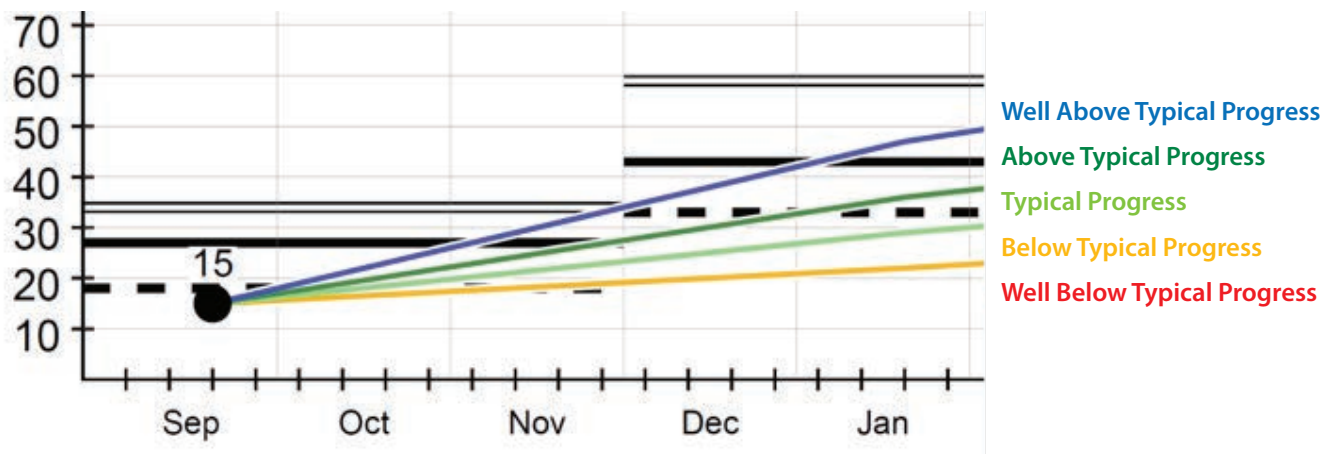
The addition of the Above Benchmark status level has not changed the benchmarks. A benchmark is still the point at which the odds are in the student's favor of meeting later reading benchmarks (approximately 60% likelihood or higher). The higher above the benchmark the student scores, the better the odds. For students who are already at benchmark, the Above Benchmark status level also provides a higher benchmark to aim for. "Overall likelihood" refers to the approximate percentage of students within the category who achieve later benchmarks, although the exact percentage varies by grade, year, and measure. Instructional decisions should be made based on students' patterns of performance across all measures, in addition to other available information on student skills, such as diagnostic assessment or in-class work. Acadience is a registered trademark of Acadience Learning Inc. www.acadiencelearning.org

Evaluation of student progress.

Finally, Acadience Reading K–6 provides a normative framework for setting individual student goals and evaluating student progress through Pathways of Progress. Pathways of Progress allows for a comparison of each student’s progress to other students who started with the same level of skill. A student’s progress can then be evaluated as typical, above typical, well above typical, below typical, or well below typical when compared to other students with the same starting level of skill.

Figure 1 illustrates Pathways of Progress for end-of-third grade Acadience Reading composite scores for each level of initial skills based on beginning-of-year composite scores. More information about Acadience Pathways of Progress is available at <https://acadiencelarning.org/resources/pathways-of-progress/>.

FIGURE 1: PATHWAYS OF PROGRESS FOR THIRD GRADE END-OF-YEAR ACADIENCE READING COMPOSITE SCORE



Acadience Reading Within an Outcomes-Driven Model

Acadience Learning assessments were developed to provide educators with information they need to make meaningful educational decisions to prevent reading failure and improve reading outcomes for all students. The Outcomes-Driven Model is a data-based, decision-making model that can be used to guide these decisions within a comprehensive, schoolwide system of literacy support, such as a Multi-Tiered System of Support (MTSS).

The Outcomes-Driven Model is based on foundational work with a problem-solving model (see Deno, 1989; Shinn, 1995) but was developed to be used within a *prevention-oriented framework* designed to pre-empt early academic difficulty and ensure step-by-step adequate progress toward outcomes that will result in established, adequate achievement (Kaminski & Good, 1998). The Outcomes-Driven Model is iterative, that is, it is a repeated process that is done to build, refine, and improve the instructional supports provided to students leading to improved outcomes. Each step is described below and illustrated in Figure 2.

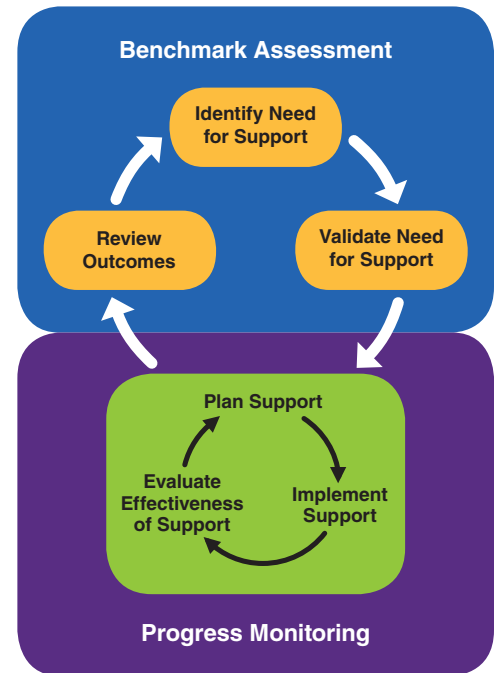


FIGURE 2: OUTCOMES-DRIVEN MODEL

Step 1: Identify need for support. This process is also known as universal screening. Its purpose is to identify those students who may need additional instructional support to achieve subsequent benchmarks and important early literacy/reading goals. In the Outcomes-Driven Model, benchmark assessment is done with all students in a school three times a year, at beginning, middle, and end of the year.

Step 2: Validate need for support. Before making individual student decisions, it is best practice to consider the student data obtained during benchmark assessment in light of other available assessment information and knowledge about the student. If there is any question about the accuracy of a student's score, the step of validating need for support is done to be reasonably confident that an individual student needs or does not need additional instructional support.

Step 3: Plan and implement support. Students benefit from instruction when instruction is matched to their learning needs. Within an effective MTSS approach, differentiated levels of instructional support are provided to students based on their demonstrated need. Students identified as on track for reading development are likely to benefit from evidence-based core instruction to meet their needs. Students who are identified as needing support are likely to require additional instruction or intervention in the skill areas where they are having difficulties.

Step 4: Evaluate and modify support. Progress-monitoring assessments provide systematic and ongoing data collection to indicate whether the instructional support being provided at any tier of instruction is effective and/or if further modifications need to be made to address individual learning needs. Progress monitoring within an MTSS approach may occur as frequently as every four weeks at Tier 2, and weekly at Tier 3.

Step 5: Review outcomes. Benchmark assessments conducted at the middle and end of the school year provide an opportunity to review outcomes and ensure adequate progress for each individual student and for all students in the schoolwide system.

Use of Acadience Reading to Identify Students At-Risk for Dyslexia

As previously described, the manifestation of dyslexia as a reading disability results from a combination of (1) difficulty with the essential early literacy and reading skills involved in accurate and fluent word reading and (2) a sustained lack of adequate progress in learning the essential early literacy and reading skills (3) when provided with generally effective instruction. This section provides an overview and illustration of the use of Acadience Reading data for each of the steps in assessing risk for dyslexia in a prevention-oriented model: 1) identify students who are demonstrating difficulty with essential early literacy and reading skills, 2) monitor progress of students in learning the skills and assess the adequacy of that progress, and 3) evaluate the effectiveness of the instructional support system.

1 Identify Difficulty with Essential Early Literacy and Reading Skills

In the first two steps of the Outcomes-Driven Model, we identify and validate need for support both for individual students and at the systems level.

For classroom teachers, reviewing data at the classroom level is an efficient way to identify students at risk for dyslexia and to target instruction to reduce risk and prevent reading failure. For example, in Figure 3, we see that the first two students listed (Otis and Evelyn) both have scores well below the benchmark (i.e., below the cut point for risk) on PSF and NWF, indicating substantial difficulty with phonemic awareness, the alphabetic principle and basic phonics. These students are likely to need intensive support to make adequate progress toward attaining essential early literacy skills. In general, students who have scores below the cut point who also have low scores in LNF or RAN are at increased risk for later reading disabilities.

FIGURE 3: CLASSROOM REPORT

School: Delight Valley Grade: First Grade, Beginning of Year Year: 2017-2018 Class: Edwards Grade 1		Classroom Report										Acadience Reading K-6	
NAME	STUDENT ID	LNF		PSF		NWF		WWR		READING COMPOSITE SCORE			
		Score	National Percentile	Score	National Percentile	CLS	National Percentile	Score	National Percentile	Score	National Percentile	Score Level	
Hernandez, Otis	13302014V1	12	2	19	11	9	5	0	17	40	3	Well Below Benchmark	
Sullivan, Evelyn	13252014V1	39	33	16	9	15	12	0	17	70	10	Well Below Benchmark	
Cruz, Nathan	13702014V1	30	17	14	8	27	39	6	64	71	10	Well Below Benchmark	
Becker, Darla	13852014V1	24	9	35	31	23	29	1	40	82	16	Well Below Benchmark	
Price, Melvin	13952014V1	18	5	43	51	30	46	3	53	91	21	Well Below Benchmark	
Hawkins, Ollie	13402014V1	34	23	37	35	21	23	0	17	92	22	Well Below Benchmark	
Collier, Tracy	13352014V1	31	18	44	54	22	26	1	40	97	26	Below Benchmark	
Lewis, Wilfred	13552014V1	24	9	45	57	28	42	0	17	97	26	Below Benchmark	
Boyd, Willie	13752014V1	43	44	19	11	44	74	11	79	106	34	Below Benchmark	
Warner, Abel	13202014V1	41	38	43	51	23	29	2	47	107	35	Below Benchmark	
Brady, Mamie	13602014V1	28	14	49	68	33	53	0	17	110	38	Below Benchmark	
Guerrero, Andre	13502014V1	46	52	44	54	21	23	0	17	111	39	Below Benchmark	
Phelps, Vicki	13102014V1	64	88	22	12	25	34	2	47	111	39	Below Benchmark	
Walton, Alfred	13652014V1	34	23	65	95	28	42	0	17	127	56	At Benchmark	
Johnson, Gerard	13052014V1	65	89	51	74	52	82	16	87	168	86	Above Benchmark	
Singleton, Tyler	13152014V1	67	91	45	57	57	86	4	57	169	86	Above Benchmark	
Lopez, Angel	13452014V1	51	66	43	51	79	94	23	93	173	88	Above Benchmark	
Simmons, Herbert	13802014V1	78	97	35	31	60	87	5	61	173	88	Above Benchmark	
Gomez, Bradford	13022014V1	52	68	76	99	57	86	0	17	185	92	Above Benchmark	
Stevens, Frank	13902014V1	64	88	62	93	59	87	19	90	185	92	Above Benchmark	
GOAL				40		27		1		113			
AVERAGE		42.3		40.4		35.7		4.7		118.3			

At the systems level, if there is a large proportion of students identified as needing additional/different instructional support, that is an indication that the need may need to be addressed at the systems level, for example, by strengthening the core of Tier 1 support. It is critical for students with dyslexia or who are at risk for dyslexia to master the same early literacy skills as students without reading difficulty, especially the phonological and alphabetic processes that provide the keys to the code (Seidenberg, 2017). A high-quality core curriculum (Tier 1) serves as the foundation for a continuum of supports and interventions that increase in intensity based on demonstrated need (Tiers 2 and 3) (Al Otaiba et.al., 2019).

Assessment information for planning instruction. A core principle of MTSS models of service delivery is that all students can learn and achieve reading goals when they are provided with high-quality instructional support to match their needs (e.g., Deno, 2016; Stoiber & Gettinger, 2016). This has been shown to be true of students at risk for reading disabilities and dyslexia (e.g, Foorman & Torgesen, 2001; O'Connor, Harty, & Fulmer, 2005). In fact, as stated by Catts and Petscher (2021), "The most notable factor that can have a positive impact on risk for dyslexia is instruction" (p. 15).

Not all students who are at risk for reading difficulties, including dyslexia, have the same instructional needs, and they may receive instructional support within any tier of instruction. Acadience Reading benchmark data provides useful information for targeting skill areas and placement into tiers of support for all students. Acadience Reading Survey and Diagnostic assessments provide more in-depth assessment data for students for whom more specific information is needed for instructional planning. Acadience Reading Survey and Diagnostic assessments are especially useful for those students demonstrating significant and persistent difficulties with the essential early literacy and reading skills in the face of effective instruction.

2 Evaluate Adequacy of Student Progress

The step of assessing the adequacy of a student's progress corresponds to Step 4 of the Outcomes-Driven Model and is at the heart of improving outcomes for students. Ongoing progress monitoring, both through periodic benchmark assessment and more frequent progress monitoring of individual students, provides data to identify students who are not making adequate progress in whatever tier of instruction they are receiving. It also allows us to determine whether the instructional support being provided at any tier of instruction is effective and/or if modifications need to be made to address individual learning needs or to strengthen the overall system of support for all students.

Setting student learning goals. A critical part of examining student progress is setting student learning goals. For students who have scores below or well below the benchmark, benchmarks may be used as goals. For those students with scores below/well below the benchmark, reaching the benchmark will decrease their risk of reading disabilities and increase their likelihood of meeting future reading goals. Acadience Pathways of Progress provides a normative framework for individual goal setting. For example, it may not be attainable for students in later grades with very low early literacy/reading skills, to reach the grade-level benchmark. Thus, we recommend considering both the Acadience Reading benchmarks and Acadience Pathways of Progress to select individual student learning goals that are meaningful, ambitious, and attainable. Information about Acadience Pathways of Progress is available at <https://acadiencelarning.org/resources/pathways-of-progress/>. Setting student learning goals provides a framework for evaluating student progress that specifies where students are, where they need to get to, what path they need to follow to get there.

Ongoing progress monitoring. Ongoing and frequent progress monitoring provides checkups on students' progress toward their goals in time to make a change in instruction. We can determine not only if students are not making progress toward goals, but how severe the lack of progress is by examining the data relative to Acadience Reading Pathways of Progress.

Figure 4 shows Evelyn’s student learning goal for basic phonics skills and the alphabetic principle as measured by NWF Correct Letter Sounds. Evelyn’s goal is set at the benchmark. The Pathways are designated by the lines that fan out from the beginning of year to the end of year. For Evelyn to attain her goal, she will need to make above typical progress compared to other students who began with the same initial level of skills. In reviewing Evelyn’s ongoing progress monitoring data, we see that she is making Below Typical progress, even with changes to instruction to meet her needs.

FIGURE 4: GOAL AND PROGRESS FOR EVELYN

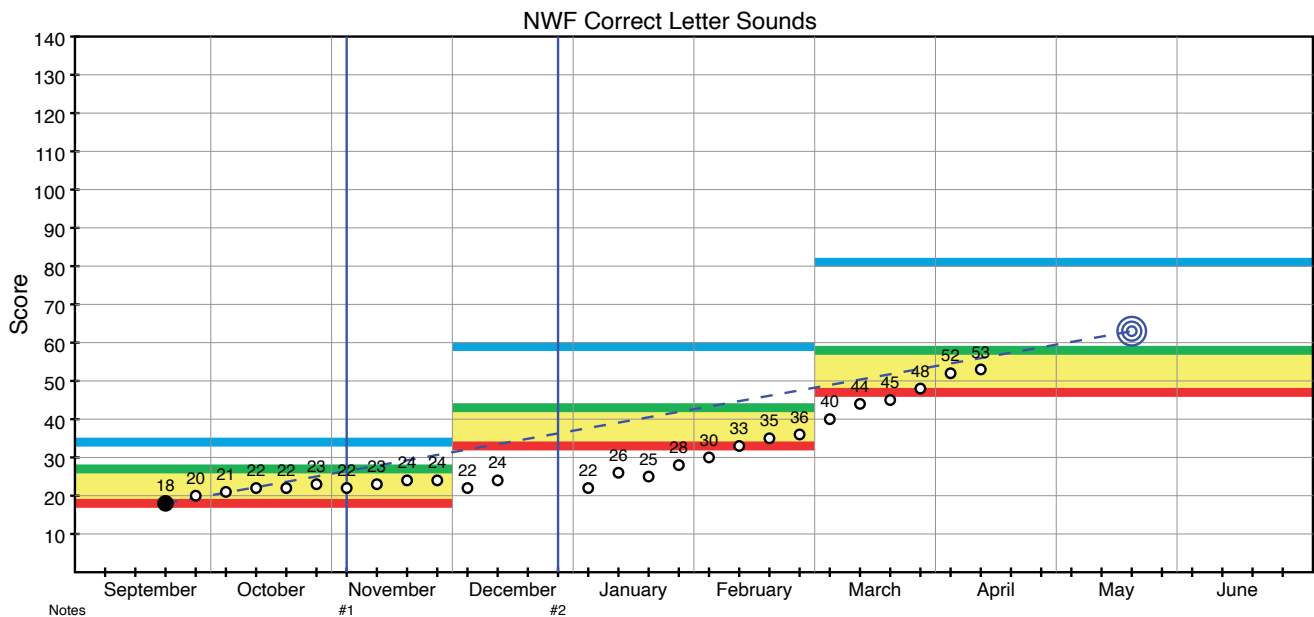
Name: Evelyn Sullivan
 StudentID: 2016-101
 School: Delight Valley
 Class: Carlson, C.
 Grade: First Grade
 Year: 2015-2016

Student Progress Monitoring Graphs



Acadience Reading K-6

- Benchmark Score
- Progress Monitoring Score
- ▲▲ Score Above Graph Boundary
- - - Aimline
- 🎯 Target Score
- 🟢 Above Benchmark Goal
- 🟡 Benchmark Goal
- 🔴 Cut Point for Risk
- | Instructional Support Change Line



- Notes
- #1: Changed focus of instruction
 - #2: smaller group, more practice

If a student’s low skills are followed by sustained lack of adequate progress in spite of instruction that has been generally effective with other students who have similarly low initial scores, the student is experiencing significant difficulty learning to read as associated with dyslexia or other reading disabilities. Thus, it is important to also examine the effectiveness of the instruction that Evelyn is receiving.

3 Examine Instructional Effectiveness

A lack of adequate progress is an indication of risk for dyslexia when the student has been provided with generally effective instruction. Consequently, one of the most important supports that we can provide to students with dyslexia or who are at risk for dyslexia is an effective schoolwide system of support. The schoolwide system includes both the core instruction provided to all students, as well as the different levels of intervention based on individual learning needs that is provided to students who are at risk for or are experiencing reading difficulties.

Ensuring an effective Multi-Tiered System of Support for students with dyslexia or who are at risk for dyslexia is important for meeting their individual student learning needs. Acadience Reading provides information about the effectiveness of the schoolwide system, including core instruction (Tier 1), supplemental support (Tier 2), and intensive intervention (Tier 3). Acadience data also provides evidence of instructional effectiveness at various levels beyond the individual student level including: (a) the intervention group in which the student is receiving instructional support; (b) the classroom; (c) the grade level at the school; and (d) the grade level at the district.

Grade Within School/District. Intervention programs are most effective in the context of effective core instruction, so evaluating the system of instruction begins with examining the effectiveness of core instruction at each grade level. We do this by examining the proportion of students with scores at or above, below, or well below the benchmark at each time period (beginning, middle, and end) of the year. If the majority of students within a grade level score Below or Well Below Benchmark, they may be having difficulty due to a lack of effective core instruction rather than dyslexia.

We can further evaluate the effectiveness of our instructional support across core, strategic and intensive systems by examining the change in student benchmark status from either beginning-of-year to middle-of-year, or from middle-of-year to end-of-year. Core systems of support are considered effective when 95% or more of students who began the year at benchmark have scores at or above benchmark at middle of year. Strategic and Intensive systems of support are considered effective when they reduce student risk for 80% or more students. For students in the strategic support group, reducing risk means moving students from strategic to benchmark. For students in the intensive support group, reducing risk means moving from intensive to either strategic or to benchmark.

Classroom. At the classroom level, Acadience Reading progress data can be summarized by documenting the proportion of students in the classroom making typical progress or above. This classroom-level data is interpreted using a normative comparison of all other classrooms in the Acadience® Data Management system. For example, a classroom in which 85% of students are making typical progress or better demonstrates above average classroom reading progress compared to other classrooms. These data provide strong evidence of generally effective instruction.

Intervention Group. Acadience data also allow educators to examine the effectiveness of the specific intervention in which the student participates. This is important because it is the level of analysis that is most proximal to the student. When examining the progress of students in Evelyn's intervention group, we see that all of them are making progress except for Evelyn (see Figure 5), providing strong evidence that the group is generally effective for students with similar initial instructional needs.

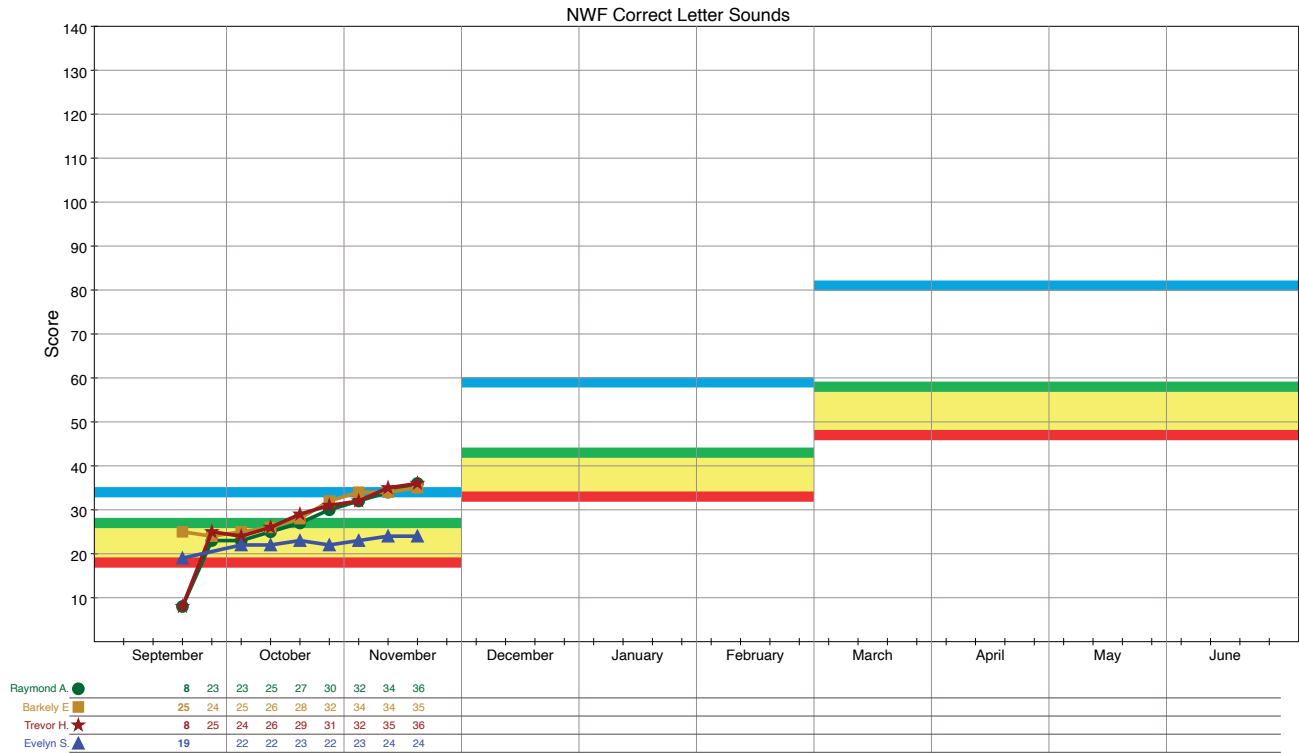
FIGURE 5: EVELYN'S PROGRESS COMPARED TO PEERS IN INTERVENTION GROUP

School: Delight Valley
 Group: Small Group Support
 Grade: First Grade
 Year: 2014-2015

Group Progress Monitoring Graphs



Acadience Reading K-6



Across the various system levels of analysis, when there is strong to moderate evidence of generally effective instruction, but the student is experiencing sustained and serious learning difficulties, this strengthens the evidence that the difficulty is not due to poor quality instruction or the lack of instruction and it strengthens the concern about dyslexia or severe reading disability. If one cannot show evidence of generally effective instruction, then it is hard to argue that the student's difficulties are due to dyslexia or other reading disabilities.

Summary

All students should be provided with good, systematic, explicit core instruction. Any student identified as at risk for dyslexia or other reading difficulties should also be placed immediately into an appropriate evidence-based intervention that is matched to his/her specific areas of need. From there, it is imperative to monitor progress, modify instruction at a formative level as needed, and provide ongoing feedback to teachers and parents. When students continue to struggle with literacy skills despite receiving additional high-quality, systematic, explicit instruction, further assessment may be warranted.

It is important to note that tests do not diagnose dyslexia but are tools used in a process that informs a diagnosis. Most often, the process involves individual assessment provided by a multidisciplinary team of qualified professionals (see The International Dyslexia Association, 2017). This multidisciplinary team may elect to obtain additional assessment information for selected students who continue to struggle with literacy skills to help determine whether they have dyslexia.



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