Getting the Most out of
STAR Reading™

USING DATA TO INFORM INSTRUCTION AND INTERVENTION

Renaissance
Learning™

Contents

Introduction

STAR Reading is a computer-adaptive assessment designed to give you accurate, reliable, and valid data quickly so that you can make good decisions about instruction and intervention. STAR Reading, operating on the Renaissance Place Real Time platform, is part of a breakthrough comprehensive assessment system for data-driven schools, which also includes STAR Math and STAR Early Literacy.

The purpose of this book is to help teachers and administrators get the most out of STAR Reading. We begin with an explanation of the test's design, the kind of data it generates, and its fundamental psychometric attributes. In later chapters, we explain how to best use the test for screening and progress monitoring. We also answer frequently asked questions and provide instructions for common software tasks. To make the book useful to a wide audience of educators, we minimize technical terms while explaining the concepts that are important to know. (STAR Reading software contains a technical manual for anyone who wants to examine the psychometric data more closely.)

We believe STAR Reading is the perfect tool for data-driven schools. It is practical and sound, and it provides a wealth of information about your students' reading ability. We hope the information you find here will help and inspire you. It is, however, only an introduction. To learn about more professional-development opportunities, including consultation on your own student data, visit our Web site's Training Center at www.renlearn.com.

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STAR Reading Basics

The only way to know whether learning is taking place is to measure it. Once you do that you can do a host of other things. You can provide students with appropriate materials. You can identify students who need help. You can analyze problems with individuals, grades, or schools; set learning goals; and make plans for meeting those goals. And you can determine whether the instruction and intervention you provide is effective.

STAR Reading is uniquely capable of facilitating all these tasks. Thanks to computer-adaptive technology, students complete the test in about ten minutes, and teachers and administrators receive the results immediately. Moreover, STAR Reading is accurate, reliable, and valid. In fact, it received the highest rating of all screening assessments from the National Center on Response to Intervention, and is among the highest rated progress-monitoring assessments.

In this chapter, we tell you for whom STAR Reading is designed, how it works, the type of data it generates, and how we know it is a good assessment. In later chapters, we explain how you can use STAR Reading throughout the school year to make thoughtful decisions that will accelerate learning for all of your students.

For Whom Is STAR Reading Designed?

STAR Reading is designed for students who can read independently. It measures students' reading comprehension and compares their reading achievement to that of students across the nation. The test provides norm-referenced scores for students in grades 1 through 12; kindergarten students who have begun to read may take the test, but norm-referenced scores are not reported.

How do you know if a student is ready to take STAR Reading? A general rule of thumb is that he or she must have a sight vocabulary of about 100 words. You can determine this in a couple of ways.

1. Estimate the student's sight vocabulary based on what you see in the classroom. Is the student able to read early-reader books independently? When called on, can the student read simple text out loud?
2. Give the student the STAR Early Literacy assessment. If the student is identified as a "Probable Reader," he or she can likely take STAR Reading and receive a score.
3. Observe the student working through the practice questions that appear at the beginning of STAR Reading. If the student can answer these questions unassisted, he or she is ready to complete the test.

Testing Emergent Readers

If a student does not have a sufficient vocabulary to take STAR Reading, administer STAR Early Literacy instead. This is a computer-adaptive test for emergent readers and provides proficiency data on 41 early-literacy skills and concepts. In many classrooms, teachers find that some students may take STAR Reading while others must be assessed with STAR Early Literacy.

Test Frequency

Most schools administer the test at least twice—in fall and spring—to get baseline data for each student and to measure growth over the school year. Many schools test more frequently. They use STAR Reading for screening purposes in fall, winter, and spring, and they monitor the progress of students in intervention programs with weekly, biweekly, or monthly testing.

How STAR Reading Works

Students take STAR Reading at individual computers. The software delivers multiple-choice items one by one, and the student selects answers. After the test is completed, the software calculates a score, and teachers and administrators view and analyze reports that show results for an individual, class, grade, or school.

STAR Reading can provide accurate data in a short amount of time because it combines cutting-edge computer-adaptive technology with a specialized psychometric test design. The best way to understand how this works is to walk through the test-taking experience.

Students start the test. You begin by explaining the test to your students using the pretest instructions that are printed from the software. These instructions explain what the test looks like, how to answer questions, and what happens if a student doesn't answer a question in the time allowed. Each student then takes the test at a computer. He or she logs in with a unique username and password that you obtain by printing the Student Information Report. (See the appendix for instructions.) Then the software looks for an estimate of the student's reading ability. If the student took a STAR test within the previous 180 days, the computer refers to that score. Otherwise, the software uses other information that has already been entered. This might be the student's grade placement or an estimate of reading ability based on a score from a different test or your professional judgment. The software presents practice questions first and, if the student does fine with those, begins delivering actual test questions.

The software adjusts the difficulty of every item. After the practice session, the software delivers a "real" test item based on the student's estimated ability level. If the student answers the item correctly, the software bumps up the difficulty level of the next item. If the student answers incorrectly, the software lowers the difficulty level of the next item. The same thing happens with the next item and the next. By continually adjusting the difficulty of an item to what the student has shown she can or cannot do, the software zeroes in on an accurate assessment of ability.

Testing Conditions

Because students take STAR Reading at a computer, they sometimes treat it like a game. But for test results to be valid, the test must be taken seriously. For this reason, the best setting is a quiet computer lab in which all students can be tested at once and the testing environment can be carefully controlled. In addition, you must read the standard pretest instructions, which you can print from the software. See the appendix for information on locating them.

We use a similar procedure in our everyday lives. As an example, let's suppose you are new to weight lifting. Perhaps you read in a fitness book that the average person of your age and gender can comfortably lift 10-pound dumbbells overhead. When you try it, those 10 pounds are easy! So you attempt 30 pounds. But, uh-oh, that's too hard. Next you lift 20 pounds—still too hard. After a little more trial and error, you conclude that 14 pounds is just right. Thus, your current ability

for lifting dumbbells overhead is 14 pounds.

STAR Reading uses the same kind of procedure. The software stores a huge number of items and "adapts" the test to each individual.

Students are given a specific amount of time to answer each question. Based on data we obtained when validating the test, we have set time limits for test items. Students in grades K-2 have up to 60 seconds to answer each item. Students in grades 3-12 are allowed 45 or 60 seconds, depending on the item type. You have the option of extending time limits for individual students who you believe need more time to read and answer each question—English language learners, for example, or some students with disabilities. Those students will then have three times longer to answer each question. If you do extend the limits, be aware that norms as well as other technical data, such as reliability and validity, are based on administering the test using the standard time limits.

Regardless of the time-limit setting, students receive a warning when 15 seconds remain for answering an item. Items that time out are counted as incorrect unless the student has already selected the correct answer.

The test stops after the student answers 25 questions. A major challenge when testing students is gathering enough evidence to draw reliable conclusions about their ability. This is especially problematic when designing conventional tests. Because every student takes the same test form, a conventional test must contain a large number of items in order to evaluate a wide spread of abilities.

Each STAR Reading test, on the other hand, is individualized and unique. Because it immediately adjusts to each student's reading ability, it delivers an accurate and reliable score after only 25 questions (not including the practice questions and a few items that are in the calibration process). In general, the test as a whole takes about 10 to 15 minutes.

The software calculates a score. To report someone's ability to do a task, you must know how difficult the task is to do. For example, think again about how you determine your weight-lifting ability. You need items—the dumbbells—and a way to express their relative weight, which is called a scale. In this case, the scale is "pounds." You identify the relative weight of the dumbbells by marking them with a number along that scale: 3 pounds, 5 pounds, 7 pounds, 10 pounds, and so on.

As we developed STAR Reading, we approached test items in the same way. We administered the items to large, nationally representative samples of students, collected the responses, and performed a statistical analysis to determine the difficulty of each item. Using a scale, we marked each item with a difficulty level: 1.67, 1.68, and so on. This process is called item calibration. Currently, we calibrate continuously by including a few additional items on each STAR test, which is why the tests your students take may have 26 or 27 items instead of 25. (Answers for these extra items do not affect a student's score.)

The method of statistical analysis we use is based on Item Response Theory (specifically the Rasch model). This type of analysis relates the probability of a student correctly answering an item to the student's ability and the difficulty of the item. We can get a sense of how this works by returning to our weight-lifting analogy. Let's suppose we asked a large, nationally representative sample of

adults to lift dumbbells of varying weights. After analyzing the data, we could say, for example, that the typical 50-year-old female has a 50-50 chance of lifting 10 pounds overhead, a 70-year-old female has a 50-50 chance of lifting 5 pounds overhead, and so on. If you're a 70-year-old female and you can lift 20 pounds overhead, we now have a good idea of your ability! We also know that if you can lift 20 pounds, you can lift 15 or 10 or 5. In other words, we can predict what you can do without even asking you to do it.

STAR Reading can provide the same kind of information. We know a student's grade level, and we know how difficult each item in our item bank is for each student in that grade level. Therefore we can look at a student's pattern of right and wrong answers on a STAR test and provide a statistically sound estimate of the student's ability. We also know the probability of a student answering any item correctly without presenting that item to the student.

The software reports various types of scores. The most important score that STAR Reading software reports is called the **scaled score**. This score is similar to pounds in our weight-lifting example. It's a fundamental measure that you can use to see growth over time. Just as your weight-lifting ability might increase from 20 pounds to 25 pounds, a student's reading ability might grow from 200 to 300. The drawback to scaled scores is that they don't tell you whether a score is good, bad, or middle of the road. As an educator, you need more information in order to know what test results mean and how to respond to them.

For this reason, we calculate additional scores, all of which are derived from scaled scores. These include both criterion-referenced and norm-referenced scores. We'll explain a few of them here and go into more detail in succeeding chapters.

A criterion-referenced score tells you how a student is doing relative to a set standard. In the case of STAR Reading, we look at commonly known vocabulary lists that indicate what words students should know per grade. By comparing a student's test performance to these lists we estimate the student's **Instructional Reading Level (IRL)**. This score represents the highest grade level at which the student can comprehend 80 percent of the text, and is the level at which the student can be most effectively taught. For example, a student with an IRL of 4.5 can comprehend 80 percent of the text that students at the fifth month of fourth grade are expected to comprehend, according to commonly accepted standards.

While criterion-referenced scores are based on what students should be able to do according to a set standard, norm-referenced scores relate to what students across the nation *can actually do*. **Percentile rank (PR)** is one of these scores. A student with a percentile rank of 85, for example, performs better than 85 percent of students nationwide of the same grade at the same time of year.

Another norm-referenced score—and one that is often misunderstood—is **grade-equivalent (GE)**. This, too, compares a student's test performance to that of students nationally. For example, a GE of 4.2 means a student is reading at a level comparable to students nationwide who are in the second month of fourth grade.

Often a student's GE and IRL are different. That's because the level at which students perform is not always the same as the level at which we want them to perform as expressed in set standards. Let's suppose a third-grade student has

an Instructional Reading Level of 3.5, indicating he can handle text written at a 3.5 level with 80 percent comprehension. His GE might be somewhat higher— let's say, 4.0. That would tell us that having the ability to read text at a 3.5 level with instructional assistance is actually about average for fourth-graders at the beginning of the school year.

We see these kinds of differences in everyday life, too. For example, the President's Health Commission might set a standard that says 10-year-old children should be able to do thirty jumping jacks without stopping. However, we are a nation of couch potatoes! Someone might do a study and find that the average 10-year-old child can only do fifteen jumping jacks in a row. Thus a child capable of doing fifteen jumping jacks would look pretty weak when compared to the standard, but about average compared to the norm.

Estimated oral reading fluency (ORF) is an estimate of a student's ability to read words quickly and accurately, which in turn leads to efficient comprehension. It is reported as the estimated number of words in grade-level text that the student can read correctly within a one-minute time span. For example, a score of 60 for a second-grade student means the student is expected to correctly read 60 words within one minute on a passage with a readability level between 2.0 and 2.5. Estimated ORF scores are based on the results of a large-scale research study that investigated the links between STAR Reading performance and assessments of oral reading fluency. They are only reported for students in grades 1 – 4. To see a document that identifies cut points and benchmarks for oral reading fluency, scroll to the STAR Reading tab within the software and click Resources.

Because different kinds of scores tell us different things, they prompt different actions. Let's look at two more students as examples. We'll say that they were tested in September and December. The first student, Jennifer Brown, had a scaled score in September of 782. By December, it increased to 946—she definitely made gains. This is called absolute growth. When we look at her percentile rank, we see that it has also increased—from the 57th percentile to the 64th percentile. This tells us she has made gains relative to her peers, which is called relative growth.

Now let's look at the second student, John Smith. His scaled score has also increased— from 573 to 601—showing absolute growth. But his PR is the same in December as it was in September: the 23rd percentile. There's been no relative growth. Thus we know that while John is learning, he's barely maintaining his standing. His growth rate needs to accelerate, perhaps through an intervention program, if he is to make more significant gains.

STAR Reading provides many reports that use these and other scores to help you analyze student needs, make good decisions, and monitor progress. We'll give details and examples throughout the rest of this book of the ones that are most commonly used. A list of all the reports available and what they include is in the appendix.

How STAR Reading Measures Comprehension

STAR Reading test items are presented in two formats. In one format, students read a single sentence with a blank to indicate a missing word. The student chooses the word that will complete the sentence from a list of three or four

words. The other format consists of a multi-sentence passage taken from authentic children's literature or nonfiction text. One sentence in the passage contains a blank to indicate a missing word. Here, too, the student must read the passage and choose the word that will complete it from a list of three or four words.

Students in grades K through 2 are presented with 25 single-sentence items. Students in grades 3 through 12 are presented with 20 single-sentence items and five passages. Questions developed at a kindergarten and first-grade reading level show three answer choices. Questions developed at a second-grade level and higher show four answer choices.

While the format of STAR Reading items sometimes leads educators to believe that it only assesses vocabulary knowledge, the test actually draws on a much more complex set of reading skills. Each item is carefully constructed so that the correct answer fits both the semantics and the syntax of the sentence. The incorrect options either fit the syntax of the sentence or relate to the meaning of something in the sentence, but they do not do both. Thus the test-taker must not only apply vocabulary knowledge but must also utilize background knowledge and semantic and syntactical skills. Only if the student uses all these cognitive skills can he derive meaning from the text, which, experts agree, is the essence of reading comprehension.
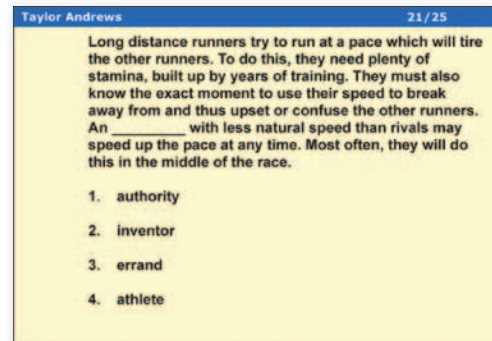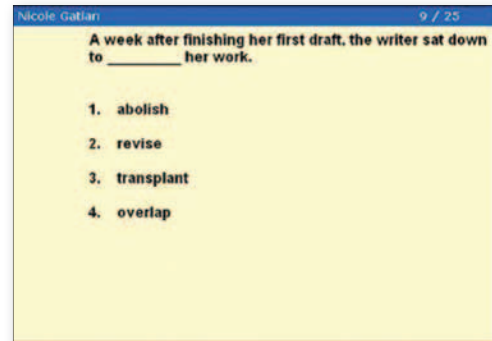
How We Know STAR Reading Is a Good Assessment

For a test to be good it must be reliable. A reliable test is like a reliable car. Just as a reliable car starts up every time you turn the key, a reliable test gives consistent results from one administration to another.

In the assessment field, the key to reliability is length. As we noted earlier, conventional tests must be long in order to provide enough items to adequately test students with a wide range of abilities. Because STAR Reading individualizes each test through computer-adaptive technology, it shows high levels of reliability with far fewer items.

Psychometricians evaluate reliability in a number of ways. One way is to administer the test to the same students within about a week's time and see if the scores are consistent. This is referred to as test-retest reliability. According to the National Center on Response to Intervention (NCRTI), a reliability level of .60 and higher is good; .80 is very good. We have collected and analyzed four types of reliability data, including test-retest reliability. In all types of analysis, the reliability level of STAR Reading exceeds .90.

Besides being reliable, a test must be valid. Validity means that the test actually tests what it is meant to test. As with reliability, there are many ways to measure this. We already looked at STAR Reading's "content validity," that is, how the items are relevant to reading comprehension. Another way to evaluate validity is to examine the degree to which one assessment correlates with other commonly accepted assessments. To check this, we asked schools to submit students' STAR Reading results along with their scores on other assessments, such as the California Achievement Test, DIBELS, FCAT, Iowa Test of Basic Skills, and Stanford Achievement Test. Our analysis showed a correlation with these tests that exceeded the guideline provided by NCRTI. The technical manual provides details.

Summary

STAR READING BASICS

- STAR Reading is designed for students who have a sight vocabulary of at least 100 words.
- The test is typically administered in fall, winter, and spring for screening purposes and as often as weekly when monitoring the progress of students who are in intervention.
- The software adjusts the difficulty of each item to a student's performance. The test is administered in about 10 to 15 minutes.
- The software calculates various scores, including scaled scores, percentile ranks, instructional reading levels, and grade equivalents, which are used for different purposes.
- STAR Reading exceeds standards for reliability and validity.

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Fall Universal Screening

If a bus overturns on the highway, one of the first things an emergency response team does is assess the accident victims. Some people may be fine. Others may have cuts and bruises that bear watching. A few may clearly need immediate, intensive treatment. This is called triage, and it means to sort and allocate aid based on need.

Students come to school with a variety of needs, too. In order to deliver the best, most appropriate instruction, you also need a triage process for assessing their condition and allocating aid. This process, during which all students are tested, is generally referred to as universal screening. STAR Reading informs universal screening by generating reliable data on every student. The software then presents the data on reports that make it easy for you to set priorities for instruction and intervention.

STAR Reading software allows you to set up as many as ten screening periods in a school year. Typically, however, universal screening is done three times a year: fall, winter, and spring. In this chapter, we focus on fall screening. Fall screening tells you where you are as the school year opens, helps you make or confirm plans for allocating resources, and raises questions that will be answered in subsequent screenings.

Before Testing

Before students can take a STAR Reading assessment, a number of tasks must be done within the software. Most of these are done by technology managers with administrator access, but some may be performed by teachers.

Enter school and district information in Renaissance Place. Someone with administrator access must enter information about each school using STAR Reading, including the school calendar, staff members, classes, and student information. A lead teacher for each class must also be designated.

Add student characteristics. When you add student information in Renaissance Place, we recommend that you include any student characteristics for which you will want data. For example, if you would like to be able to compare the progress of students receiving free lunch to that of the school population as a whole, you must identify those students in the software. The software includes a list of characteristics, and you may also define your own characteristics. See the Renaissance Place software manual for full instructions on entering district, school, and student information.

Enter screening dates. STAR Reading has three default screening periods: Fall (September 1 – 15), Winter (January 1 – January 15), and Spring (May 1 – 15). You can edit these dates and add more screening periods, up to a maximum of ten. (Instructions are in the appendix.) Your first screening period must be as close to the beginning of the school year as possible so that you can address instructional needs quickly. Because you are measuring each student's achievement relative to

that of other students, administer STAR Reading to everyone within a fairly short time period. The software allows you to define a 30-day screening period, but two weeks or less is recommended.

During Testing

Once testing is underway, you can check to see how testing is proceeding. On the Renaissance Place Home page, go to Screening, Progress Monitoring, & Intervention, and choose the school you wish to view. During the screening period, you will see a bar graph under Screening Status that shows the percentage of students who have been tested in each grade. Click Preview to see a summary of the results so far.

Understanding Screening Data

Once the screening period has ended, the STAR Reading Screening Report displays the test data. Take a look at the example on p. 12 as we explain what the data means.

Notice first that the default setting is for the report to display results for a single grade, in this case, grade 5. This is so you can compare students who are at the same point in school and do grade-level planning.

Next notice the line that extends horizontally across the graph. This is the benchmark. A **benchmark** is the lowest level of performance that is considered acceptable. In STAR Reading, the default benchmark is the 40th percentile. Students at the 40th percentile perform better than 40 percent of the students in the national sample in that grade at that time of year. We use the 40th percentile as the default benchmark because research experts, along with many states, consider it to mean "working at grade level" or "proficient." Ideally, 80 percent of students will be at or above the benchmark.

Now look at the colored bars on the graph. These categorize students in relation to the benchmark. Basically, they show you visually what proportion of students in a grade are doing okay—that is, are "At/Above Benchmark"—and what proportion are not doing okay. The "not okay's" are further categorized by urgency of need into groups titled "On Watch," "Intervention," and "Urgent Intervention."

We place students into these categories using what are called **cut scores**. Cut scores are simply a set of numbers intended to help you identify students you may need to be concerned about. Other professions have similar sets of numbers. For example, it's commonly accepted that an oral temperature of 98.6 is "normal" and a temperature over 101 in an adult is cause for concern. These cut scores are guidelines that help doctors make health decisions. Our cut scores help you make educational decisions.

The cut scores on the Screening Report are scaled scores that correspond to percentiles. The categories are defined in the following way:

- At/Above Benchmark =At/above 40th percentile
- On Watch = Below 40th percentile
- Intervention = Below 25th percentile
- Urgent Intervention = Below 10th percentile
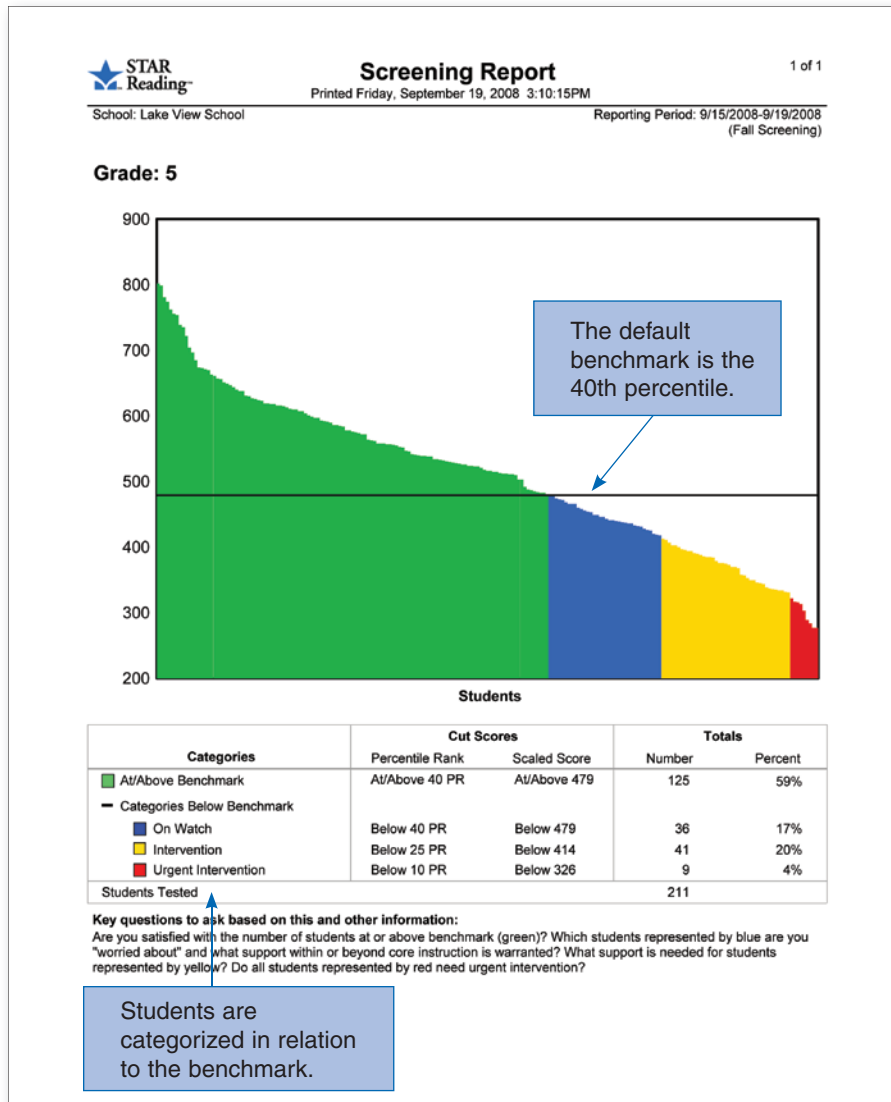
The table below the graph on the Screening Report shows the number and percentage of students who fall into each of these categories. In the example above, only 59 percent of students are at or above benchmark, far fewer than the 80 percent that is considered ideal. When a substantial number of students are performing below grade level, it usually indicates there is a problem with general classroom instruction. We'll talk about how to respond to data like this in the next section.

Another way to analyze the data on the Screening Report is to look at where students are in relation to the benchmark. For example, let's suppose 75 percent of the students in a grade are at or above benchmark but the block of green that represents them is close to the benchmark and fairly flat. (See the example on p. 13.) This tells you that students are barely making it over the benchmark line and you need to pay attention to your core instructional program, and possibly strengthen it, to accelerate growth for these students. Similarly, if the block of blue representing on-watch students is close to the benchmark and also fairly flat, you know you have many students with the potential to reach benchmark.
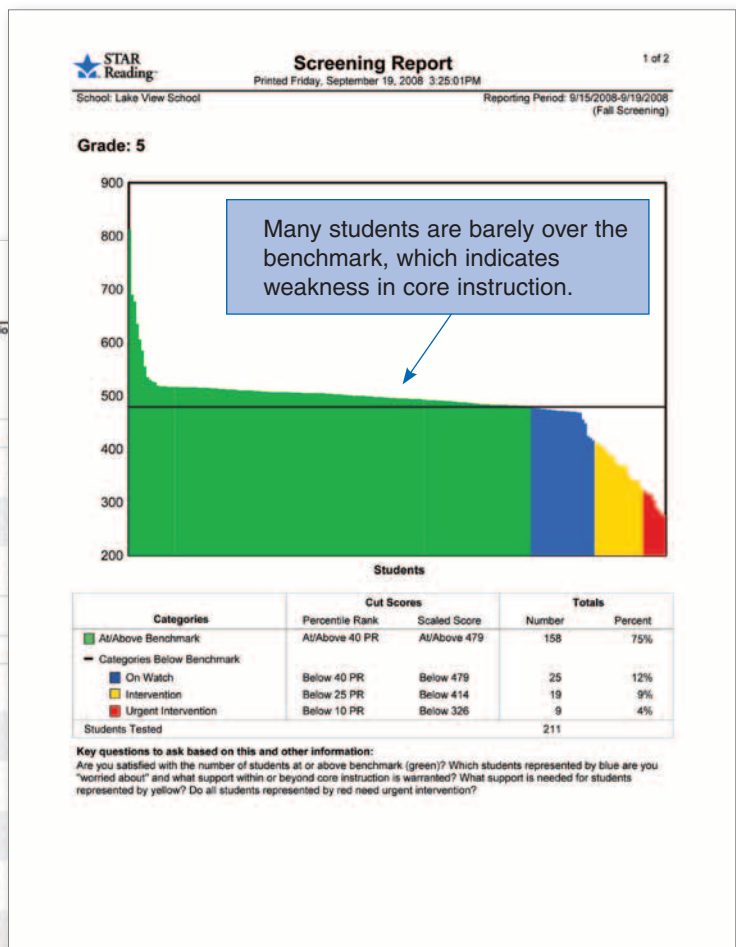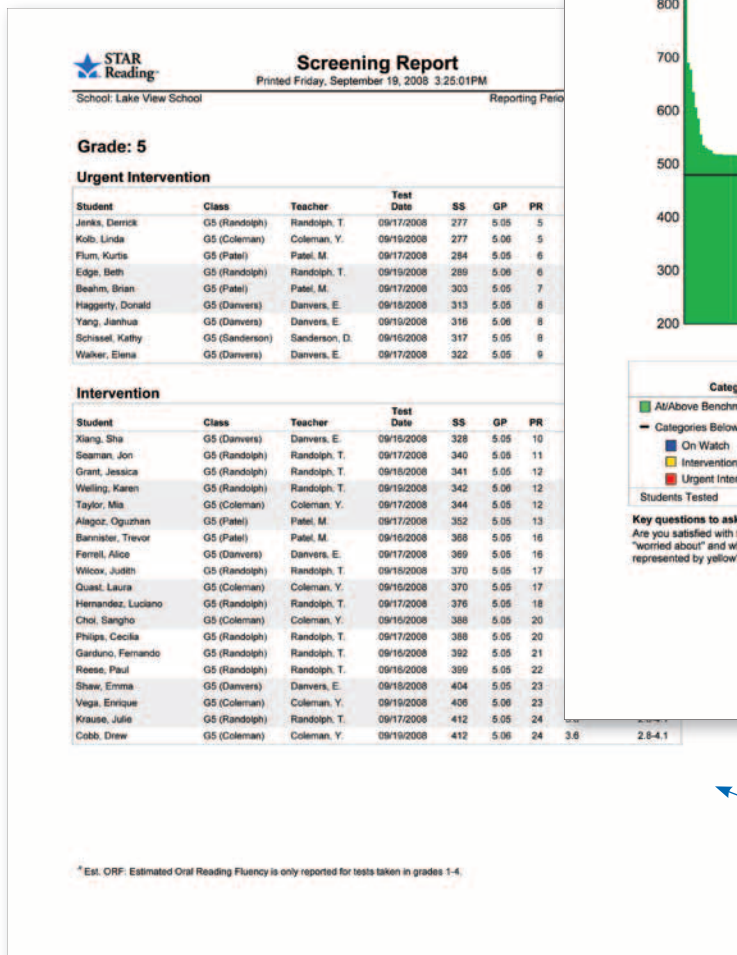
The report's additional pages list the students who fall into each category. Students needing urgent intervention—with the lowest scaled scores—are listed first.

Some states define cut scores for intervention, and they may differ from the software's default values. Because of this, cut scores can be changed by someone with administrator access. The appendix provides instructions. We urge you, however, not to lower it. Doing so lowers expectations, which ultimately lowers achievement. Moreover, lowering the benchmark means you may not make annual yearly progress nor meet state standards. Instead, if you have many under-performing students, acknowledge that it will take a few years to get 80 percent of them to the benchmark level and work steadily toward that goal.

If you have entered student characteristics in the software, such as free lunch, Title I, or Gifted/Talented, you can run a Screening Report for just those students within a grade. You can then analyze the distribution of

High Achievers

You may want to identify a cut score above which students will be eligible for enrichment or supplementary learning activities that enhance and go beyond the core program. Then manually draw a line on the report to see how many students fall into this category.

Many students are barely over the benchmark, which indicates weakness in core instruction.

The report's additional pages list students in each category.

scores for students sharing that characteristic and you can compare their data to that of the grade as a whole.

Acting on Fall Screening Data

Suppose you go to the doctor with an aching foot. He orders x-rays, which reveal a stress fracture. The doctor looks over the results and then … does nothing. What would you do? Switch doctors! Tests are supposed to precede action.

The same principle holds true in education. Being a data-driven school doesn't mean *collecting* data, it means *acting* on data. Here are some guidelines for acting on fall screening data.

Assess the overall situation schoolwide. If you are an administrator, review the Screening Report for each grade in your school. Are large numbers of students below benchmark? Of those, how many are flagged for urgent intervention? Do some grades appear to have more students in trouble than others? Are you satisfied with the number of students who are at or above benchmark? Are most of those students barely meeting the benchmark or is there a good distribution of scores? What might generalized low or mediocre scores mean? Does the core curriculum need to be examined? Do teachers need more professional development to fully implement the curriculum? If you screened students the previous spring, you probably already raised these questions. In this case, compare the spring scores to the new fall ones: Did students lose ground over the summer? Does that affect any plans you made for allocating resources or training teachers?

Solve staffing and scheduling issues. If you screened students the previous spring, you likely made plans for staffing and scheduling as well. But even if fall is your first opportunity to screen with STAR Reading, you can still do these tasks. Review the Screening Report for each grade and consider the intervention programs you already have in place or have planned to implement. Will they be sufficient to meet student needs? This is a good time to review the school schedule as well. Must you alter it to make room for additional intervention programs? (See p. 17 for scheduling suggestions.)

Establish grade-level teams. The STAR Reading scores you see at the beginning of the year provide a look into the future—if you do nothing, the students at or above benchmark will likely meet proficiency standards by spring and the students below benchmark will not. Your goal, therefore, is to do something to move more students to proficiency. However, the data on the Screening Report does not tell you exactly what to do. For that you need a team of people who will analyze, prioritize, plan, and make decisions.

Many schools establish grade-level teams that meet immediately after the fall testing period. Effective teams consist of members who understand students, who know the resources that are available, and who have the authority to allocate resources. Thus members of a team usually include the principal and all the teachers for the grade. They may also include the data manager, curriculum coordinator, and/or Response to Intervention (RTI) coordinator if a school uses an RTI framework. While administrators may have previously looked at intervention and resource needs across grades, grade-level teams consider the needs of their specific grade. They also assess the needs of individual students and place them in appropriate programs.

Assess achievement within the grade. It's best if grade-level teams meet within a week after testing. Examine the general level of achievement for the grade and the distribution of scores. How many students are beginning the year "at grade level"—at or above the benchmark level? Are many students hovering just below the benchmark in the On Watch category? Will you need to make adjustments within the core instructional program to ensure that those students reach proficiency by the end of the year? Do staff members need more training in order to implement the core instructional program more effectively?

Set measurable grade-level goals and make plans for meeting them. Decide where you would like your grade to be by the next screening date. Make those goals measurable. For example, you might aim to have the percentage of students at or above benchmark increase from 59 percent to 65 percent by the winter screening date in January. Decide what strategies you will use for general classroom instruction to meet that goal. Also consider how you will make sure those strategies are implemented well. You might, for example, plan to do peer modeling and coaching, ask advice of a literacy coach, and/or set up periodic meetings to talk about how the strategies are working and troubleshoot as needed.

> **Working Without a Team**
>
> If your school does not have grade-level teams, you can still use the Screening Report—and all STAR Reading reports—effectively. Follow the same steps outlined here: Analyze student performance within a grade, identify needs, plan how to meet those needs, allocate resources across and within grades, and select students for intervention.

Also determine how many students in the Intervention and Urgent Intervention categories you can serve and how. What resources are available—reading specialists, paraprofessionals, intervention materials—and how will you use them? In the next chapter, we'll explain how to set individual progress goals for these students.

Plan interventions for students performing below the benchmark. Make sure you have the information you need to make good decisions. This means taking into account more than a single test score. Assemble additional assessment data, anecdotal records, and examples of daily work. Begin with the students needing urgent intervention. They are represented by the red bars on the first page of the Screening Report and are listed by name on the following pages. These are the students who will likely continue to struggle and drop farther and farther below benchmark if they don't receive help. Decide which of these students will be best served by an intervention within the regular classroom and which need more intense intervention through a separate program. If you are working within an RTI framework, remember that when a student scores in the Urgent Intervention category, it does not automatically mean the student should be in a Tier 3 intervention setting. Rather, it indicates that the student needs immediate attention.

Next, consider students represented by yellow—those needing "intervention." What kind of support is best for them? They, too, are unlikely to reach benchmark unless action is taken.

STAR Reading and English Language Learners

If you administer STAR Reading to ELLs, be aware that their test performance is influenced as much by their English language proficiency as by reading ability. Our experience tells us that if a student's English language proficiency level is advanced or higher, he or she can take STAR Reading successfully. Much like native speakers, these students understand the subtleties of the language. This is not true, however, for students at lower English proficiency levels. When they answer an item incorrectly, it's usually because of a lack of knowledge of English vocabulary, though it may be due to a deficiency in reading ability. Consequently, scaled scores on STAR Reading can be misleading. Therefore, if you use STAR Reading to identify ELLs performing below benchmark, also evaluate their English proficiency level. Consider whether a student's primary need is for more intense instruction in reading or in English language development.

As you plan interventions for these students, consider the following questions:

- What does this particular student need?
- Has anyone intervened with this student before?
- How intense was the intervention? Whole group? Small group? Individualized?
- How successful was the intervention?
- Was the intervention implemented the way it was intended and for a sufficient amount of time?
- Based on this information, what is the best next step for this student?

A good principle to keep in mind is that as a student's need intensifies and becomes more urgent, he or she will require attention from someone with greater expertise. Just as patients with problems that are difficult to solve are referred to health specialists so must students with persistent or severe problems receive instruction from expert educators.

Finally, consider the students represented by blue and designated "on watch." Which of these are you worried about? Can they be supported through the core curriculum? Is further differentiation required? Some students may be fine without supplemental instruction and others will not be. Of those, some may need just a small tweak in their instruction to reach benchmark. Decide how you will monitor those students so that you can intervene if you later discover they are not making progress.

As you make these decisions, bear in mind that intervention can take many forms, including:

- Additional guided independent reading practice as facilitated by Accelerated Reader. Many schools find that a high-quality AR implementation built on best practices such as individualized goal setting leads to a boost in student achievement schoolwide.
- Differentiated small-group instruction within the regular classroom. Many instructional reading programs include supplementary materials, strategies, and assessments for both low-achieving and high-achieving students. Content-area teachers can utilize trade books written at various reading levels as supplementary or core materials.
- Focused instruction for individuals or small groups that is in addition to core instruction delivered within the regular classroom. Renaissance Learning's Successful Reader program is an example of a specially designed reading intervention program.

Also be aware that the intent of the Screening Report is not to earmark students for specific programs such as special education. Rather, the report is designed to alert you to students who need attention. When the data on an individual student suggests a complex or unusual problem, many schools schedule a separate meeting that takes a more comprehensive look at the student's learning history and capabilities.

Ideas for Scheduling

Plan a Daily Intervention Within the Classroom

For example, a classroom of 25 students might include five students who are struggling with reading. While the other students are engaged in an independent activity under the supervision of a paraprofessional, the classroom teacher works with the small group of five.

Schedule a Schoolwide Intervention/Enrichment Time

Schedule a common period for the entire building. For example, if the intervention/ enrichment period is 1:00 to 1:30, all students requiring intervention or enrichment participate at that time. The students not requiring intervention or enrichment are assigned an independent learning task during the same time. This type of scheduling usually requires additional staff, such as Title I teachers, reading specialists, G/T teachers, paraprofessionals, and/or special education teachers.

Have Intervention Teachers Float

Under this model, one or two specialists work with groups from different classrooms throughout the day. Each classroom has a dedicated time for receiving the intervention.

Additional Options for High Schools

Establish a Period Within the Traditional Schedule

If, for example, the traditional schedule consists of six to eight periods of 50 to 60 minutes each, one of these periods, such as an elective or study hall, can be used for intervention.

Configure a Block Schedule

With this option, a "Four Block" schedule includes four 80-minute instructional blocks, a 40-minute intervention/enrichment period and time for lunch. Students are assigned to a daily 80-minute instructional block of language arts and an 80-minute block of mathematics. They are assigned social studies and science every other day for 80 minutes. The fourth block consists of elective classes and physical education. This leaves the 40-minute period available for intervention or enrichment. A teacher's schedule includes three 80-minute blocks and the 40-minute I/E period. The remaining 80 minutes are reserved for team and individual planning.

Sources:

Burns, M. K., & Gibbons, K. A. (2008). *Implementing response-to-intervention in elementary and secondary schools.* New York: Routledge.

School Scheduling Associates (2008). Four-Block middle school schedule with intervention/enrichment period and alternating grade level and department common planning time. Available online: http://www. schoolschedulingassociates.com/notes/?p=10

Using STAR Data to Plan Instruction

Testing students at the beginning of the school year gives you baseline data that helps you plan instruction. The STAR Summary Report provides a good summary of the test results for a class. For each student, it lists a scaled score (SS), grade equivalent (GE), percentile rank (PR), normal curve equivalent (NCE), instructional reading level (IRL), and zone of proximal development (ZPD). (See the example below.) The IRL is the best score to use when selecting appropriate instructional materials for a student. As we explained in Chapter 1, the IRL represents the highest grade level at which the student can comprehend 80 percent of the text and is the level at which the student is most effectively taught. You might use this score to select an appropriate basal-reader level, for example, or other texts.

STAR Reading™ — Summary Report

Printed Wednesday, October 14, 2009 3:42:02PM — 1 of 1

School: Lake View School

Reporting Period: 9/1/2009 - 10/14/2009 (Custom)

Report Options
Reporting Parameter Group: All Demographics [Default]
Group By: Do Not Group
Sort By: Last Name

Student	Class	Teacher	Test Date	Rank	GP	SS	GE	PR	NCE	IRL	Est. ORF[#]	ZPD
Baker, Michael	Language Arts 5A	Warner, Alan	10/14/2009	3	5.14	350	3.0	12	24.7	3.0		2.6-3.6
Benitez, Victor	Language Arts 5B	Warner, Alan	10/14/2009	2	5.14	449	4.0	30	39.0	3.7		3.0-4.5
Carr, Jerome	Language Arts 5A	Warner, Alan	10/14/2009	3	5.14	350	3.0	12	24.7	3.0		2.6-3.6
Green, Paulette	Language Arts 5B	Conner, Kaitlin	10/14/2009	5	5.14	284	2.5	5	15.4	2.3		2.3-3.3
Jones, Jackie	Language Arts 5A	Conner, Kaitlin	10/14/2009	6	5.14	203	2.0	1	1.0	1.4		2.0-3.0
Rus-Kong, Phala	Language Arts 5A	Conner, Kaitlin	10/14/2009	1	5.14	491	4.5	40	44.7	4.1		3.2-5.0
Average					5.14	355	3.1	12	25.3	3.0		2.6-3.7

PR Distribution Summary

Percentile	Students	Percent
Below 25th	4	80.0
25th to 49th	2	20.0
50th to 74th	0	0.0
75th & Above	0	0.0
Number of Students: 6		

GE Distribution Summary

GE	Students	Percent
0.0 - 0.9	0	0.0
1.0 - 1.9	0	0.0
2.0 - 2.9	2	33.3
3.0 - 3.9	2	33.3
4.0 - 4.9	2	33.3
5.0 - 5.9	0	0.0
6.0 - 6.9	0	0.0
7.0 - 7.9	0	0.0
8.0 - 8.9	0	0.0
9.0 - 9.9	0	0.0
10.0 - 10.9	0	0.0
11.0 - 11.9	0	0.0
12.0 - 12.9+	0	0.0

[#]Est. ORF: Estimated Oral Reading Fluency is only reported for tests taken in grades 1-4.

This report summarizes test results for a class and suggests an initial ZPD for each student.

Using STAR with AR

To achieve the most growth in any endeavor, practice must be individualized. A novice piano player, for example, doesn't perform at the same level of competency as a concert pianist. Therefore her practice goals and materials must be different. The same holds true for reading. If you use Accelerated Reader to support a reading practice program, you'll find STAR Reading to be an indispensable tool for individualization. Fall data gives you a starting place for each student and helps you determine appropriate goals.

Identifying an Initial ZPD. When students practice with books that are too hard, they become frustrated. If they practice with books that are too easy, they are unlikely to improve their reading skills. The zone of proximal development, or ZPD, represents the level of difficulty that is neither too easy nor too hard, and is the level at which optimal learning takes place.

STAR Reading provides a ZPD for each student, which appears on a number of reports. This is a suggested starting place for independent reading practice. We say "starting place" because a single testing event is not as good at determining the right level of practice as the student's daily reading performance. When a student is able to average 85 percent or higher on AR quizzes, then you know the student is reading books at the right level, that is, within his or her ZPD. For a fuller explanation of ZPD and personalized reading practice, see our publication *Getting Results with Accelerated Reader*, which is available as a free download or for purchase as a spiral-bound copy through our Web site, www.renlearn.com.

Setting Personalized AR Goals. Accelerated Reader is most effective when students have individualized point and book-level goals. You can use a student's GE score from the STAR Reading Summary Report to set these goals. The Goal-Setting Chart, which is in the appendix, provides guidelines. You can also use our online goal calculator at http://argoals.renlearn.com/.

This report is useful during parent conferences.

Communicating With Parents

No matter how you use fall data, remember that parents must be involved in all decisions concerning their children. Important communication points are (1) whenever a student is put "on watch" and (2) whenever instruction is differentiated, either within the regular classroom or through an intervention program. STAR Reading includes a Parent Report that summarizes a student's test results, explains what the scores mean, and describes what a student needs for optimal reading growth. Instructions for printing the Parent Report are in the appendix. An example of a letter that can be sent home to inform parents of instructional modifications within an RTI program is also in the appendix.

If a meeting is held to discuss the needs of an individual student, be sure to invite parents to attend and as the intervention

Parents with Internet access can view AR quiz results online.

proceeds give them ready access to progress-monitoring data, which we describe in the next chapter. If you are using Accelerated Reader and parents have Internet access, encourage them to regularly login to Renaissance Home Connect to view their child's independent reading practice data.

Using STAR Reading in Your RTI Program

Many states and districts have adopted an educational approach called Response to Intervention or RTI. The aim of RTI is to give all students high-quality classroom instruction first and to provide increasingly intense, individualized intervention to low-achieving students. Each student's response to intervention is monitored frequently and adjustments are made based on the response data.

RTI implementations look different in different schools but a tiered model is central. If your school has embraced RTI, it may be represented in general terms by this pyramid.

Using the STAR Reading Screening Report with a Tiered Model. In their review of assessments, the federally funded National Center on Response to Intervention found that STAR Reading met the highest scientific standards as a tool for RTI. Because STAR Reading identifies students by categories, you might be tempted to think of students needing intervention, for example, as "Tier 2 students" and those needing urgent intervention as "Tier 3 students." Doing so, however, would not be true to the principles of RTI. The RTI model is based on the idea that every student has an equal chance of success. Tiers represent actions. A student may be enrolled in a Tier 2 or 3 intervention for a period of time but may also move from that tier into another in the course of a year—as, indeed, any student might. The overall goal is not to label students and place them, more or less permanently, into a program, but to identify students who are likely to struggle and provide the appropriate level of assistance so that the majority of students perform to benchmark standards within the core instructional program.
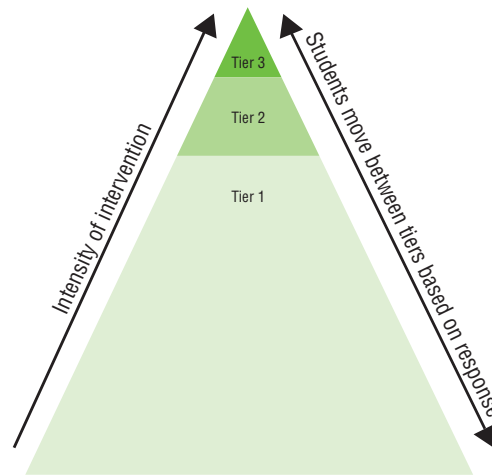
Summary

FALL UNIVERSAL SCREENING

- Fall universal screening helps you set priorities for instruction and intervention and allocate resources.
- Students at or above the benchmark are considered to be working at grade level. Ideally, 80 percent of students should be at or above the benchmark.
- Cut scores define categories of need. For example, students who score below the 10th percentile are considered in need of urgent intervention.
- Grade-level teams use screening data to identify the appropriate level of instruction for each student and decide how that will be delivered.
- STAR Reading provides baseline data for measuring growth.
- For those who use Accelerated Reader, STAR Reading also provides ZPDs and GE scores, which help teachers guide students to appropriate books and establish individualized reading practice goals.
- Parents must be informed of all instructional decisions.

3

Starting an Intervention, Goal Setting, and Progress Monitoring

As adults, we know the power of goals. Whether we're saving money to buy a house, taking classes to learn new skills, or starting an exercise program to improve our fitness, a goal focuses our behavior. We think through important questions, such as "What must I do to meet this goal? What can I do—realistically?" Most importantly, a goal gives us a fixed point against which we can measure our progress. For the same reasons, we recommend that you set reading achievement goals for students who are beginning an intervention.

Of course, the ultimate goal for all students is to reach or exceed benchmark, which is typically the 40th percentile. This, however, can take time. Therefore STAR Reading software enables you to set intermediate goals for a specified intervention period. For example, if a student is currently performing in the 15th percentile, your goal might be to move the student to the 20th percentile by the end of a semester. The advantage of setting intermediate goals is that you can more quickly see if a student is making progress toward the long-term goal.

Typically, goals are set only for students who are in intervention, usually by the intervention teacher. To help you with this task, we provide a goal-setting tool within the software that is referred to as a "wizard." It records the important information about an intervention and helps you calculate goals for individual students based on their current reading status. The software then plots a student's progress and projects whether or not he or she will meet the goal. This enables you to judge the effectiveness of an intervention.

Creating Intervention Groups

If a number of students are receiving the same intervention, it's useful to create a special "group" within the software and assign the intervention teacher to it. This gives the intervention teacher access to the students' test data. For example, let's suppose Joe Brown is in Mrs. Smith's seventh-grade homeroom, but for the first semester he will also be receiving supplementary reading instruction in a small group with the reading specialist. Joe's "official" placement is in Mrs. Smith's "class," and that is how the district's technology manager enrolled him in the software. But since the reading specialist also needs access to Joe's test data, she creates a "group" in STAR Reading that includes Joe and the other students with whom she will be working. The appendix has instructions for creating and managing groups.

Setting Up an Intervention and Goal

STAR Reading has powerful capabilities, but to take advantage of them you must supply the software with the right information at the right time. Think of it the way you would a scientific experiment. Let's suppose, for example, your doctor discovers you have high cholesterol. The first intervention in a situation like this is a heart-healthy diet and regular exercise. In order to measure the effects of this intervention, your doctor must have baseline data—that is, a measure of your cholesterol level at the start of the intervention. He then sets expectations for a certain period of time. For example, he might say your cholesterol level needs to drop a specific amount by the end of six months. You go back to his office after that six-month period, and he tests you again. He compares the data on your baseline test to your most recent test and evaluates whether the intervention regimen of diet and exercise has been effective. Then he decides what to do next.

To truly measure the effectiveness of a reading intervention, you must follow a similar procedure. Take a look at the illustration of the software wizard on this page. The numbers correspond to the steps we describe below.

Step 1: Obtain baseline data at the right time. By default, the date of a student's most recent test is the anchor test. It marks the beginning of the intervention, and the results are the baseline data. (Beginning in spring 2010, you will be able to select the anchor test from a drop-down menu that shows all the STAR Reading tests the student has taken.) It's important that you administer a test close to the actual start of the intervention. Doing so has these advantages:

- Testing a student when an intervention begins gives you true baseline data. That means once the intervention is underway you will be able to measure the student's response to it more accurately.
- Better baseline data means the software can give you better information about what kind of growth you can expect the student to achieve. We talk more about this information in Step 4.

Step 2: Name the intervention and set an end date in the software. Just as a doctor describes an intervention in your medical record so must you describe a student's reading intervention in the software. Take another look at the illustration below. Under Intervention Details is a spot where you type in the intervention name as you'd like it to appear on reports. This could be the name of a program or a description, such as "After-school tutoring 30-min. daily."

Below that indicate an end date for the intervention. The end date can be the end of a marking period, semester, or school year, or any other period of time. Just be sure to allow enough time for the intervention to work. Experts recommend no fewer than eight weeks. (Some states and districts specify ten or twelve weeks.) If you are uncertain about how much time a student needs to meet a goal, make your best guess. You can change the goal end date at any time.

Step 3: Review the reference points. As we mentioned earlier, below the end date is the starting test data. In this example, Mia Taylor tested on 9/17/2008 and achieved a scaled score of 344, which placed her in the 12th percentile. Underneath are two reference points. The first tells you how fast the student's ability needs to grow for her to hold her ground in relation to her peers. The second tells you the growth rate needed to reach benchmark by the end of the school year. In this case, if Mia sustains a growth rate of 1.7 scaled scores per week she will remain in the 12th percentile at the end of the school year. To reach benchmark—the 40th percentile—she needs a growth rate of 6.0 scaled scores per week. In most cases, the goal you set will be between these two points.

Step 4: Select the goal type. When your doctor sets a goal for lowering your cholesterol, he doesn't draw a number out of a hat. He bases the goal on what research studies say can be expected. We provide similar information based on data we have collected on the reading growth rates of 1.3 million students across the country.

Underneath "Select a goal type" in our example on p. 23, you'll see two choices: Moderate and Ambitious. If you select "Moderate" and click Calculate Goal at the bottom of the screen, the software displays the growth rate achieved by 50 percent of students with a similar percentile rank as the student for whom you are setting goals. If you select "Ambitious," the software displays the growth rate achieved by 25 percent of students with a similar percentile rank. Also displayed are the scaled scores and percentiles that would result from these growth rates.

In this example, a moderate goal for Mia is a growth rate of 2.6 scaled scores per week. An ambitious growth rate is 4.4 scaled scores per week. If Mia meets the moderate goal, her scaled score will be 390 and she will be in the 15th percentile by the end of the intervention period. If she meets the ambitious goal, her scaled score will rise to 423 and she will be in the 20th percentile.

If neither of these goals seems right, you can define a custom goal by entering a growth rate in scaled scores per week or by entering the scaled score or percentile rank you want the student to achieve by the end of the intervention period. You could set a goal between the moderate and ambitious options, for example, if you thought that was more appropriate. Or if a student is within reach of the benchmark, you might want to set the goal at the benchmark level.

How do you know which goal is best? Consider what you know about the student and the intervention. Your doctor, for example, when setting your cholesterol goal would keep in mind how compliant you are. Are you motivated to change your eating and exercise habits? Will the changes be fairly easy for you to incorporate? Do you have a supportive family? If yes, he might set an ambitious goal. If, on the other hand, he were prescribing an experimental drug for which the effects were less well known, he might set a moderate goal. Similarly, think about the following factors when setting reading goals:

- **The student.** What do you know about the student? What does his or her educational history indicate about motivation and desire to learn? What was the student's learning rate up to this point? If a student has been unmotivated and frequently absent from school, or if the student has switched schools often, you might conclude that a moderate goal is most realistic. Conversely, you might decide that since the student's needs are urgent, an ambitious goal is essential.
- **The intervention.** How intensive is the intervention you are choosing for this student? For how much time per day will the student receive additional instruction? Is the student part of a small group or large group or will the student get individual help? Generally speaking, the more individualized attention a student receives the greater the potential for large gains.
- **Your experience.** Have you implemented this intervention before? How have students responded? Is it a research-based intervention with proven effectiveness? Will you be able to implement it the way it was intended? If you are using materials, strategies, or approaches that you know well and that have worked in the past, you may feel more confident about setting ambitious goals.

Step 5: Save the information. Finally, don't forget to click Save when you are satisfied with your choices.

In our example, Mia's school only recently acquired STAR Reading. After reviewing the Screening Report in September, the fifth-grade team realized that they did not have enough resources to meet the needs of all the students below benchmark. They decided to take interim steps while they developed intervention strategies, acquired materials, and arranged schedules. To accommodate the range of abilities in her class, Mia's homeroom teacher, Ms. Davis, decided to differentiate her reading instruction within the core curriculum. She also decided to give extra attention to a small group of low-performing students, including Mia, for 20 minutes a day, while her teaching aide worked with the rest of the class. Because Mia is so far behind, Ms. Davis set an ambitious goal. We'll show you the results of that plan a little later in this chapter.

Goals for ELLs and Students with Special Needs

The reference data and goal types in the goal-setting wizard were calculated based on a heterogeneous sample of students. They may not be applicable to English language learners and students with learning or other disabilities. Make your best estimate when setting goals for these students. After a few years of experience, you will be better able to define moderate and ambitious goals for them.

Progress Monitoring

STAR Reading software allows you to measure reading achievement as often as weekly. The Student Progress Monitoring Report then displays the data in an easy-to-read fashion. The purpose of this report is to help you determine if a student is responding to an intervention. If the student is responding, decide if he or she is ready to move out or should continue. If the student is not responding, schedule a problem-solving meeting to figure out why and decide what to do next. If you change the intervention, you can then edit the software so it can keep track of the student's progress in the new intervention.

STAR Reading™
Student Progress Monitoring Report
Printed Wednesday, October 15, 2008 04:34:05PM
2 of 2

School: Lake View School

Reporting Period: 9/5/2008-1/20/2009
(Semester 1)

Taylor, Mia
Grade: 5
ID: MT9456

Class: G5 (Davis)
Teacher: Davis, J.

Mia's Current Goal

Goal: 423 SS (Ambitious)	Target Date: 1/20/2009	Expected Growth Rate: 4.4 SS/Week

Mia's Progress

Program	Program Begins	Test Date	Scaled Score	Growth Rate[a] Scaled Score/Week
Intervention 1	09/17/2008	09/17/2008	344	-
		09/24/2008	328	-
		10/01/2008	351	-
		10/08/2008	338	-
		10/15/2008	340	0.2

The flat trend line indicates Mia has not responded to the intervention and has made no progress toward her goal.

Page 2 shows Mia's test results and growth rate.

STAR Reading™
Student Progress Monitoring Report
Printed Wednesday, October 15, 2008 04:34:05PM
1 of 2

School: Lake View School

Reporting Period: 9/5/2008-1/20/2009
(Semester 1)

Taylor, Mia
Grade: 5
ID: MT9456

Class: G5 (Davis)
Teacher: Davis, J.

short period. Focus on the general direction emerging after
ividual scores. The student's trend line and growth rate

Legend: ◇ Test score — Trend line — Goal line ★ Goal | Intervention change

Mia's Current Goal

Goal: 423 SS (Ambitious)	Target Date: 1/20/2009	Expected Growth Rate: 4.4 SS/Week

Interpreting the Student Progress Monitoring Report
The first page of the Student Progress Monitoring Report displays progress data graphically for an individual student. If you look at the example on p. 26, you'll see blue diamonds scattered across the graph. These represent each test the student has taken. (Months of the year are indicated along the horizontal axis.) Results are given in scaled scores. Remember, scaled scores are like inches or pounds and are the best way to show absolute growth over time. For example, if a child's height changes from 51 inches to 53 inches, you know she has grown. If a student's scaled score on STAR Reading changes from 350 to 375, you know her reading ability has grown.

Now take a look at the vertical red line on the report. This marks the starting test for the intervention. You'll see in this example that Mia's STAR Reading score at the start of the intervention was 344. Now notice the gold star on the right side of the graph. This represents the goal that Mia's teacher, Ms. Davis, entered in the software. In this case, the goal was for Mia to grow 4.4 scaled scores per week. The green line on the report connects Mia's STAR Reading score at the beginning of the intervention to her goal. We call this green line the goal line, and it represents the achievement path Ms. Davis wants to see Mia take during the intervention.

Next notice the black line. This is called the trend line. The software looks at a student's test results and projects the student's growth into the future. It displays this line to show you how the student's progress is trending. By comparing the goal line to the trend line, you can see at a glance if a student is on track to reach his or her goal. A trend line appears after five tests are taken, beginning with the start of an intervention. Statistically, this is the minimum number of tests needed to report a trend with confidence. In this case, Mia's STAR scores have gone up and down (see sidebar) but her trend line is below her goal line, which indicates she is not making sufficient progress to meet the goal Ms. Davis set for her. In fact, her trend line is flat, which suggests she has not made any progress.

> **Why STAR Scores Go Up and Down**
> When a test is administered frequently, an individual's score often fluctuates. This may be due to the test's standard error of measurement; student anxiety, illness, motivation, or level of attention; or a statistical phenomenon called regression to the mean. Regression to the mean is the tendency of those with the highest scores on an initial test to score closer to average on a second test and those with the lowest scores to score closer to average—and therefore higher—on the second test. These factors do not make a test unreliable or invalid. But because some fluctuation is likely, a trend line is a better indicator of growth and projected growth than scores from individual tests.

The second page of the report shows the student's current goal and actual test data. A growth rate is reported after five tests. In this example, Mia's growth rate is a scant 0.2 scaled scores per week.

Once displayed, the trend line typically changes with every subsequent test. If you've ever been on a savings plan, you may have experienced this phenomenon. Suppose, for example, you start saving in September and set a goal to put aside a thousand dollars by June at a rate of $25 a week. You stick to your plan just fine for the first few months. The exact amount actually varies a bit from week to week, but since you are consistently adding to your savings account the general trend is upward and your average "savings growth rate" is $25.39 per week. Then the holidays come along, and for a number of weeks, you put less than $25 into your piggy bank. Consequently, your growth rate changes—now it only averages

$17.62 per week. Your trend line adjusts to reflect that change. It even looks like you won't meet your savings goal. But after New Year's Day you get back on track. Your growth rate and trend line adjust once more.

A student's reading growth rate and trend line will show similar fluctuations. After each test, the software recalculates these measurements so that you get the best, most current information.

Responding to the Data

STAR Reading data can tell you if a student is responding to intervention, but you must respond to the data in order for it to have value. Schools review data in different ways. In some cases, intervention teachers test students weekly and request problem-solving meetings for individual students whenever there is cause for concern or a reason to change a student's placement. Other schools hold grade-level meetings every four to six weeks to examine progress-monitoring data for all students below benchmark. Regardless of your protocol, certain scenarios are likely to emerge.

A student is on track to meet the goal. This, of course, is the best scenario. However, it still raises questions. The first one: Is the student ready to move out of intervention? There is no standard answer to this. You must consider both the student and the student's problem. Some reading problems—very specific phonics deficits, for example—might be remedied quickly with focused instruction. Other problems, like comprehension deficits, can take a considerable amount of time to truly be overcome. The trend line only indicates if a student is on track to meet a goal. This means the intervention has been successful so far. What the trend line can't tell you is whether or not the student needs to stay in the intervention in order to actually meet the goal. That's a matter of professional judgment.

A student is not on track to meet the goal. This situation also calls for analysis. Sometimes when students in intervention do not improve we conclude they must need more intensive intervention or special education. This can be true, but other factors must be considered.

- Was the intervention implemented with fidelity? That is, according to the way it was designed and for the recommended amount of time? For example, suppose an intervention program calls for 60 minutes of daily supplementary instruction but your school only schedules it for three times a week. If a student doesn't make progress in that situation, it may not be because of something going on with the student but because of what isn't going on in the intervention program. One way to determine if a weak implementation is at fault is to look for patterns in the data. If a number of students in an intervention are not making progress, that's a red flag that the intervention needs to be evaluated. The troubleshooting checklist on p. 29 can help you figure out why.

- Is what you are doing right for this particular student? Sometimes an intervention needs to be tweaked in relatively minor ways to meet the needs of an individual. Perhaps the materials are too hard or unmotivating, or perhaps the student needs more positive reinforcement.

- Has the student been in the intervention long enough for progress to become apparent? Many experts believe that a reading intervention must be at least eight weeks long. Some students, perhaps because of the nature or severity of their problem, may require longer periods.

- Do you really understand the student's problem? When you assign students to an intervention at the beginning of a school year, you may have incomplete information. This is common, especially in schools that have many students below benchmark and cannot hold meetings for all individuals before placing them in an intervention. For this reason, when a student does not show progress, you may need to gather more diagnostic information. Perhaps, for example, what appears to be a comprehension problem is really a decoding or second-language problem.

If a student does not meet a goal, you have a number of choices. If the intervention was not implemented with fidelity, you can keep the same intervention with the same type of goal while improving the implementation. If the student simply needs more time to show gains, you can extend the goal end date. If the intervention does not match the needs of the student, you can change the intervention (along with its goal and end date) based on what you now know about the student.

In our example, Ms. Davis is very concerned about Mia's lack of progress. She also realizes that she has not been able to stick to the intervention plan. Because of other demands on her time, she has only been able to meet with her small group of struggling students two or three times a week. In the meantime, Lake View School has reconfigured its schedule and added an intervention period during which students below benchmark receive supplementary instruction. The fifth-grade team decides to place Mia in a reading intervention class taught by Ms. Whitman, a certified reading specialist.

TROUBLESHOOTING AN INTERVENTION Use this checklist to see why an intervention program might not be effective.		
	YES	NO
Is the intervention research based?		
Has the intervention been implemented for the intended amount of time?		
Can students perform the academic work assigned to them?		
Is the teacher committed to conducting the intervention?		
Are materials readily and continuously available?		
Has the teacher been shown how to implement the intervention by a knowledgeable coach?		
Has the coach observed the intervention at least once to ensure that the teacher is using the intervention correctly and has all the needed materials?		
Has the teacher been provided with follow-up support after the initial training?		
Does the teacher have a systematic plan for managing routines and procedures so that academic engaged time is maximized?		

* Adapted from Witt, Joe, Amanda M. VanDerHeyden, and Donna Gilbertson. "Troubleshooting Behavioral Interventions: A Systematic Process for Finding and Eliminating Problems." School Psychology Review 33, no. 3 (2004): 382-383. Copyright 2004 by the National Association of School Psychologists, Bethesda, MD. Reprinted with permission of the publisher. www.nasponline.org.

Editing an Intervention and Goal

If you move a student to a different type of intervention or change the duration or goal of an intervention, enter that information in the software. That way, the Progress Monitoring Report can display data on the student's progress during each intervention separately. This enables you to identify, over time, the intervention that is most successful.

To edit an intervention and goal, you will use a wizard similar to the one you used to set up the original intervention. The first option is to change the duration or goal of an existing intervention. For example, you may have assigned a student to a supplementary intervention program for a semester and now want to extend it to the end of the school year. Alternatively, you may want to shorten an intervention for a student who is doing really well.

If you are switching a student to a different intervention—for example, from small-group instruction within the classroom to a supplementary intervention class—select the option to set up a new intervention and goal. Then follow the same process used for setting up the original intervention and goal, which we described earlier in this chapter. This tells the software that one intervention has ended and another has begun. In our example, Mia's intervention program has changed but her goal, which is ambitious, remains the same. The instructions in the appendix will walk you through all these steps.

On-Going Progress Monitoring

As the school year goes on, continue to periodically test your intervention students so that you can see if the interventions are working, fix problems that arise, and move students out of intervention if that seems appropriate. Some schools administer STAR Reading weekly or biweekly to students in intervention; others test monthly. Whatever you choose, remember that a student must take five tests before the report can display a trend line, which is your best indicator of the student's rate of growth. Make test results available to key people, including homeroom teachers, intervention teachers, and—especially if your school is using an RTI framework—grade-level teams.

On p. 31, we show what a Student Progress Monitoring Report looks like when a student has been in two or more interventions in a school year. As we noted earlier, the trend line for Mia's first intervention is flat, indicating her reading ability did not grow during that period. The second vertical red line indicates the start of the second intervention in the month of October. Mia's goal line—the green line—connects her score at the start of the second intervention to her goal. The black trend line shows how Mia's achievement in this intervention is trending. It's going up. This tells us she is responding well to the second intervention. Indeed, her trend line is slightly above the goal line, which shows she is on track to meet her goal by the target date.

The second page of the report provides exact data. In the seven weeks since the second intervention began, Mia's growth rate has accelerated to 5.2 scaled scores per week. This exceeds her goal of 4.4 scaled scores per week and is evidence that she is responding well to the intervention.

Mia's growth rate exceeded expectations.

Mia responded well to the second intervention.

Comparing Progress to National Norms

While the Student Progress Monitoring Report shows you how a specific student is responding to an intervention, another report can show you how a class or an individual is progressing compared to students nationally. This report is called the Annual Progress Report, and an example is below. It shows the performance of a fourth-grade class during the course of a school year. The blue diamonds represent the class's average scaled score for each testing event. The green lines represent the progress of students in the 25th, 50th, and 75th percentile in the same grade in a national sample. After a class takes two STAR Reading tests, a black trend line appears. Details are presented below the graph.

In this example, Ms. Beeman's class has made steady progress. In September, the average scaled score of 375 put the class in the 33rd percentile for fourth-graders. By June, with an average scaled score of 545, the class had moved to the 54th percentile. An Annual Progress Report for an individual student would look similar and display the same type of data. You can print this report for any student, not just those in intervention.

STAR Reading and RTI: Problem Solving vs Standard Protocol

Schools working within an RTI framework may have different ways of placing students in intervention. Some schools use a problem-solving method. When a struggling reader is identified, for example, teachers and specialists may do additional diagnostic testing and hold a multi-staff meeting to analyze the student's deficits and plan individualized intervention strategies. Other schools, especially those that have many low-performing students, use what are termed standard protocols. These schools simply may not have the resources to provide individualized interventions to large numbers of students. Instead, they initially provide a standard protocol, especially at Tier 2. Students with similar skill needs (for example, fluency, decoding, comprehension, or a combination of all three) are grouped together and participate in a research-proven intervention program. Staff choose the intervention from a limited number of defined programs. The advantages of a standard protocol are that decisions about placement can be made within a few meetings and fewer resources are required to meet student needs.

Summary

STARTING AN INTERVENTION, GOAL SETTING, AND PROGRESS MONITORING

- Make sure a student is tested shortly before an intervention begins so that you have accurate baseline data.
- Enter details about an intervention in the software and set growth-rate goals.
- Administer STAR Reading as often as weekly to monitor progress.
- Review the Student Progress Monitoring Report after each test. By comparing a student's trend line to the goal line, you can see if the student is on track to meet the goal for the intervention.
- After analyzing progress-monitoring data, take action. Before moving a student to a more intensive intervention, make sure the current intervention has been implemented with fidelity and matches the student's needs, and that the student has been engaged long enough for it to have an effect.
- Every time you change an intervention or a goal, enter that information so that the software can provide data for each intervention separately.
- To see how a class or student is progressing compared to students nationally, review the Annual Progress Report.

Winter Universal Screening

Once the school year is underway, it's essential that you keep an eye on all students, not just those in intervention. Mid-year is also a good time to pull back and take this larger view. Are the students who are performing at or above benchmark continuing to succeed? How are the "on watch" students faring? Are the students below benchmark moving upwards? This is the time to evaluate your core instructional program and intervention strategies, move students in or out of intervention, and make programmatic changes that will accelerate reading growth for all students.

Assessing the Overall Situation

After all students have been tested, print a Screening Report for each grade. As in the fall, we recommend that the data be reviewed on a couple of levels. Administrators need to look at the data for every grade to monitor growth. Are students on track to do well on state tests? Since mid-year is closer to the state testing period than fall, it's a better predictor of student outcomes, yet early enough to affect them. Mid-year is also the time to reassess resource allocation. Do some grades need more resources—staff and materials—than others?

In addition, grade-level teams must get together, analyze the data for their grade, review progress toward grade-level goals, and make instructional decisions about individual students. As in the fall, meeting as a team promotes a shared sense of responsibility and also facilitates the movement of students in and out of intervention.

Review the categories. Compare the winter Screening Report to the Screening Report you printed in the fall. Scan the distribution of students by looking at the blocks of color, and then review the totals below the graph. Have the Intervention and Urgent Intervention categories grown smaller? Have students in the On Watch category moved closer to the benchmark? Has the At/Above Benchmark category expanded? How close are you to having at least 80 percent of students in this category?

Take a look, for example, at the fall and winter Screening Reports for grade 5 that are on p. 35. You'll see that the On Watch, Intervention, and Urgent Intervention categories (shown in blue, yellow, and red) have all shrunk, while the At/Above Benchmark category (shown in green) has expanded. This indicates that over the last few months learning has accelerated for students in this grade.

Now imagine a different scenario, such as that shown in the second winter Screening Report. This data does not look so positive. When we compare the fall and winter reports, we see that fewer students are at or above benchmark. As the numbers below the graph tell us, the percentage has decreased from 59 percent to 55 percent. At the same time, the percentage of students in the On Watch category has swelled—from 17 percent to 20 percent, and the percentage of students in Intervention has increased from 20 percent to 21 percent. The percentage of students in the Urgent Intervention category has remained the same. These numbers indicate that the needs of students hovering near the benchmark are not being met and the lowest performing students are continuing to struggle.
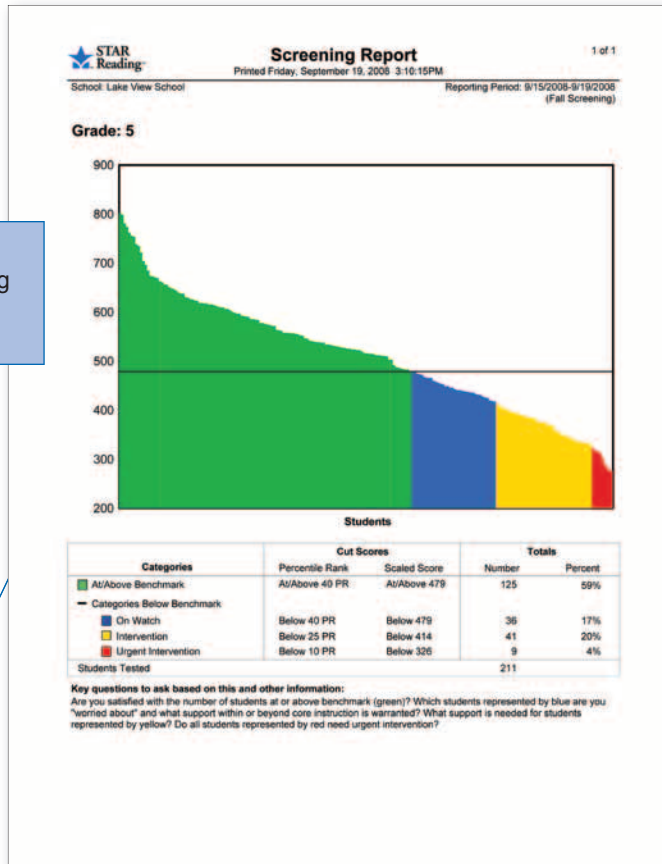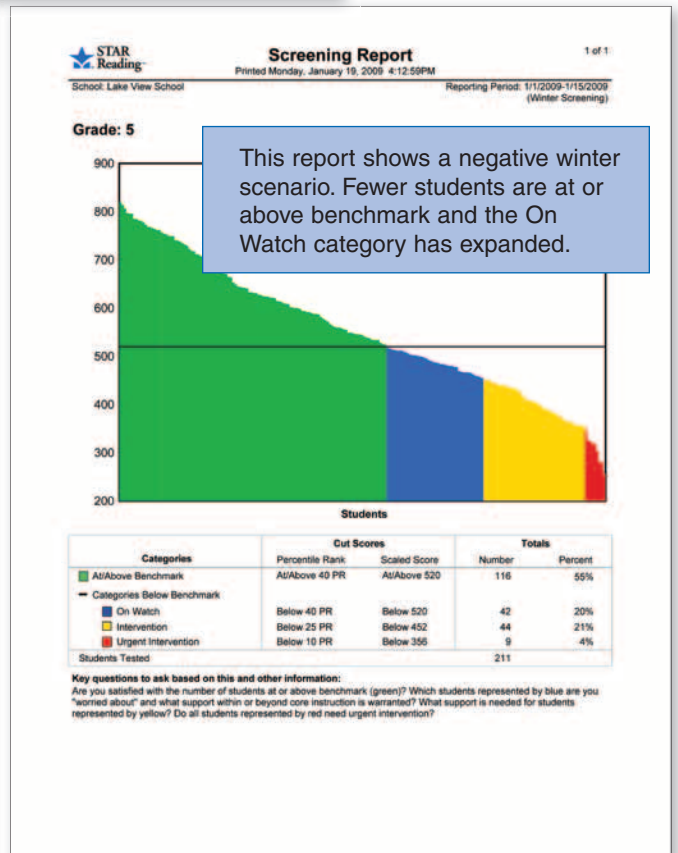
Check grade-level progress by comparing fall and winter Screening reports.
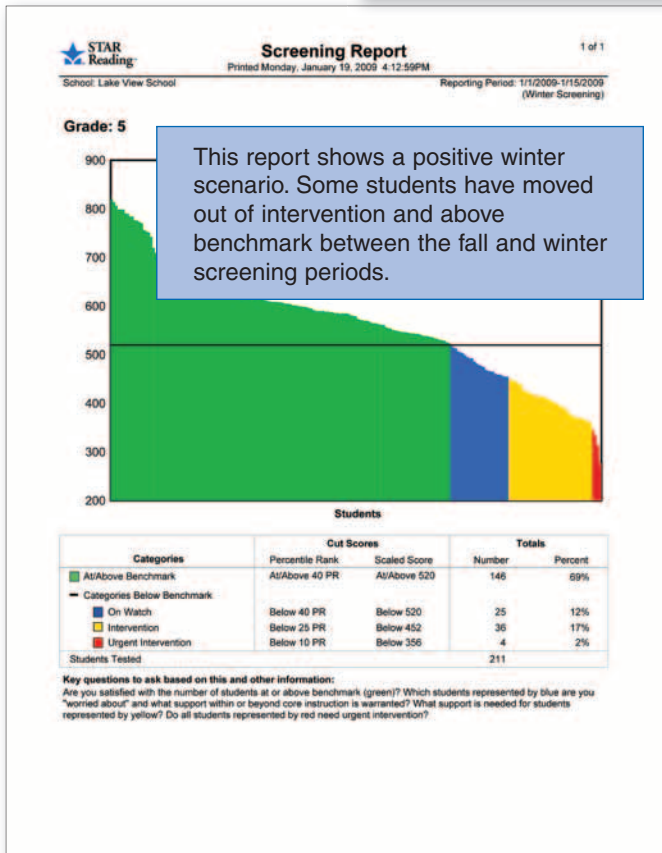
This report shows a positive winter scenario. Some students have moved out of intervention and above benchmark between the fall and winter screening periods.

This report shows a negative winter scenario. Fewer students are at or above benchmark and the On Watch category has expanded.

Ask the hard questions. If the number of students at or above benchmark has dropped between fall and winter, you need to ask why. Something is happening— or not happening—that is causing student growth to slow down. This signals a problem in the core instructional program. Are classroom teachers working with research-based materials? Are they employing sound instructional practices? Is classroom instruction sufficiently differentiated to meet all students' needs? Do teachers need guidance and support in the form of professional development to implement the core program effectively? Since on-watch students usually remain in the regular classroom, the same questions must be asked when they move downwards into the Intervention category. If students aren't moving out of the Intervention and Urgent Intervention categories, and certainly if their numbers are growing, take a thorough look at those programs. Why aren't students responding?

Conversely, if you are seeing movement upwards—out of intervention to benchmark and above—it's worthwhile identifying what you are doing right. Take the time to consider whether teachers have what they need to maintain these gains.

Assessing Grade-Level Needs

If you are an administrator or someone else who has the authority to allocate resources within your school, compare the needs of different grades. Are some grades now in more need than others? Should you shift resources from one grade to another? Suppose, for example, three new students needing intervention enrolled in the seventh grade. In addition, a few other seventh-grade students moved from the On Watch category to the Intervention category. At the same time, a number of eighth-grade students who were getting one-on-one help from a reading specialist have shown progress and may now be supported within the regular classroom. In this case, it might make sense to reassign the reading specialist to the seventh grade.

Assessing Individual Needs

> **High Achievers**
>
> Keep your eye on high-achieving students as well as struggling students. Check to see if their reading ability is advancing and evaluate whether any special programming or differentiation provided for them has been successful.

In addition to evaluating the progress of a grade as a whole, grade-level teams must take a close look at individuals. At mid-year it's especially important to see what has happened to students who were at or near the cut points in the fall. Because of the standard error of measurement, it's easy for these students to "jump" from one category to another. What does the test data look like now for students who were at or near the benchmark cut point in the fall? Are they solidly above the benchmark or "On Watch"? What does the data look like for those who were at or near the cut point for intervention? Are they now above the cut point or have they fallen below it?

Before making decisions about students, gather multiple sources of information, such as diagnostic test data, anecdotal records, and examples of daily work. Who is ready to move out of intervention? Who needs to stay in intervention to make further gains? Whom did you miss during fall screening? Can the needs of students not making sufficient progress be met by differentiating instruction within the regular classroom? If that strategy has already been tried and proved unsuccessful, is it appropriate to place the students in a supplementary

intervention program? If students already in intervention are not making progress, decide if they need more intensive intervention and how that will be delivered. See Chapter 3 for guidelines on how to make these decisions and how to use the Progress Monitoring Report to review a student's intervention history.

Making Concrete Plans

Once you have identified problems, decide how you will correct them. How can you provide more effective core instruction? What changes can you make now to accelerate growth throughout the rest of the school year? What goals can you set for improvement?

For instance, in our example the fifth-grade team decided to take a close look at what they were doing within the regular classroom. In this case, they were using Accelerated Reader to support their reading practice program for all students. Because they had recently attended a series of training sessions, they had a new understanding of AR best practices. By looking at the data on AR reports, they could see their students were not comprehending books well enough to make significant gains. They also were not getting a sufficient amount of practice. As a team, they made a list of best practices they needed to implement and agreed to review AR data regularly. Finally, they brainstormed ideas for maintaining quiet, efficient classroom environments so that students would be able to spend more time reading without distractions.

After establishing this plan, the fifth-grade team set a goal to reclaim the ground lost in the first half of the year and go even farther—to have 65 percent of students at or above benchmark by the end of the school year and to reduce the percentage of students in the Intervention and Urgent Intervention categories to below 20 percent.

Mid-Year Screening at the Class or Group Level

The STAR Reading Screening Report can be printed for a class or a group as well as for an entire grade within a school. Doing so shows you the distribution of students within the class or group across the four categories. If you are an administrator, for example, you might run Screening Reports for specific classes that you are concerned about. If you are a classroom teacher or an intervention teacher, you might view the report for your own class or group. You can then quickly identify students who are struggling, and by comparing the winter Screening Report to the fall Screening Report, you can see if students are moving out of the red, yellow, and blue categories to green—at or above benchmark.

Mid-Year Screening by Characteristic

The default setting for reports is to show all demographics. However, if you have identified students by ethnicity, language, Title I, gifted/talented, or another characteristic, you can run a Screening Report that includes just the students who share a characteristic within a grade. For example, you could view a Screening Report for each grade and see how free-lunch students are distributed across the categories. By comparing fall and winter reports, you can also see if they are progressing to benchmark.

Summary

WINTER UNIVERSAL SCREENING

- Winter screening gives you the opportunity to check the status of all students and make instructional adjustments as needed.
- Compare the fall and winter STAR Reading Screening Reports, and look for movement toward and above the benchmark.
- If students have not moved toward the benchmark or if they are slipping under the benchmark, this is a signal that the core instructional program needs to be evaluated.
- If students are not moving out of the Intervention and Urgent Intervention categories, those programs also need to be evaluated.
- Based on the screening data, make plans to improve or maintain the effectiveness of your instructional programs.

5

Spring Universal Screening

The purpose of universal screening in spring is two-fold: It serves as a post-mortem for the school year and it helps you pre-plan. As you review three sets of data (fall, winter, spring), you see how students have performed over the course of the year. With this information, you can determine the effectiveness of your instructional programs and intervention strategies, see if the decisions you made earlier in the year have led to reading gains, and begin to make data-based plans for the next school year.

Using the Screening Report to Evaluate Your Instructional Program

There are a couple of ways to determine whether the core instructional program in a grade or school is working. The first is to look at how many students are performing at or above benchmark. As mentioned earlier, 80 percent is generally considered ideal, and if you have a high-performing school, it makes sense to expect your student population to hit that number.

> **Viewing Fall/Winter/Spring Reports**
>
> Save copies of reports that you print for each screening period or reprint the reports from the software. See the appendix for reprinting instructions.
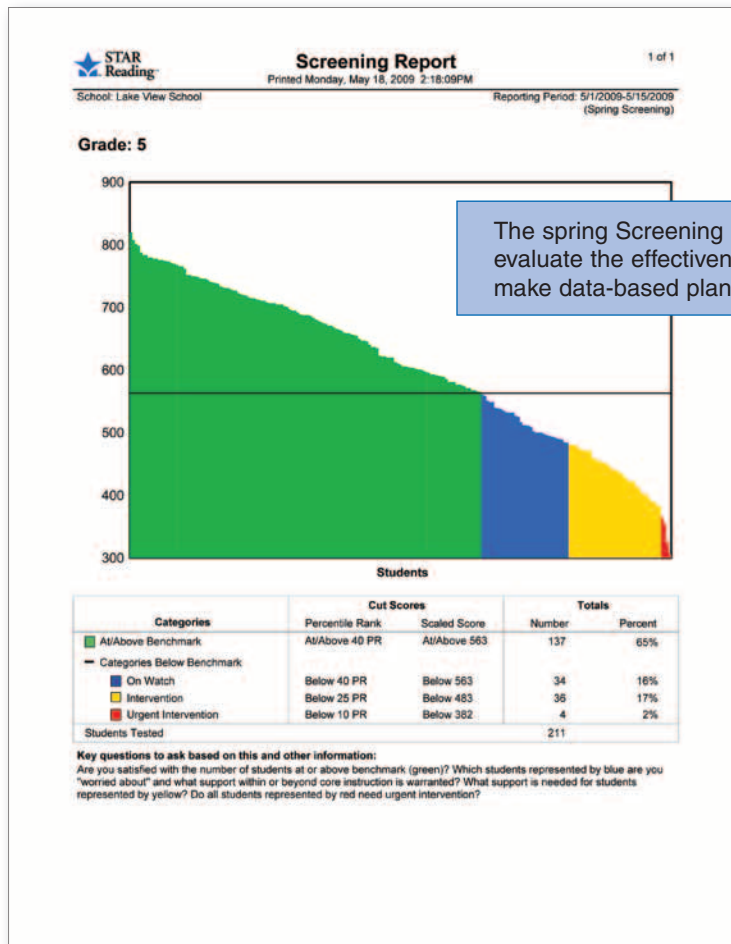
> The spring Screening Report helps you evaluate the effectiveness of your programs and make data-based plans for the next school year.

STAR Reading

Screening Report
Printed Monday, May 18, 2009 2:18:09PM

1 of 1

School: Lake View School

Reporting Period: 5/1/2009-5/15/2009
(Spring Screening)

Grade: 5

Students

Categories	Cut Scores		Totals	
	Percentile Rank	Scaled Score	Number	Percent
■ At/Above Benchmark	At/Above 40 PR	At/Above 563	137	65%
− Categories Below Benchmark				
■ On Watch	Below 40 PR	Below 563	34	16%
□ Intervention	Below 25 PR	Below 483	36	17%
■ Urgent Intervention	Below 10 PR	Below 382	4	2%
Students Tested			211	

Key questions to ask based on this and other information:
Are you satisfied with the number of students at or above benchmark (green)? Which students represented by blue are you "worried about" and what support within or beyond core instruction is warranted? What support is needed for students represented by yellow? Do all students represented by red need urgent intervention?

For some schools, however—schools that have historically been low performing or that have a transient population and/or large numbers of struggling readers—this may not be a reasonable indicator. In these cases, some experts say that having 80 percent of students in the On Watch and At/Above Benchmark categories combined is a sensible goal. Also look at growth over multiple years. If you are moving more students to benchmark from year to year, that's a sign that core instruction is not only working but improving.

Additional indicators of a healthy core instructional program are:

- Nearly all children are growing from fall to winter to spring. The percentage of students at or above benchmark is increasing or, at minimum, holding steady. Students are moving upwards from the On Watch, Intervention, and Urgent Intervention categories.
- You have met grade-level progress goals that were set mid-year.
- There are no gradewide learning problems and few classwide learning problems. All grades and almost all classes show achievement gains from fall to winter to spring.
- Achievement is equitable. Students in all demographic groups—gender, ethnicity, language, socio-economic status—are achieving.

Let's take a look at our fifth-grade example on p. 39. As we saw in the previous chapter, the Screening Report told us that the percentage of students at or above benchmark had dropped from 59 percent to 55 percent between fall and winter. Teachers then set a goal to have 65 percent of their students at or above benchmark by the end of the year. The spring Screening Report shows that they met this goal. This indicates that they did indeed strengthen their core instructional program.

Using the Screening Report to Evaluate Your Intervention Strategies

Spring is also time to evaluate the effectiveness of your intervention strategies, both those that are implemented within the regular classroom and supplementary programs. Indicators of healthy intervention programs are:

- Students as a whole are moving out of the Intervention and Urgent Intervention categories toward benchmark.
- You have met grade-level progress goals that were set mid-year.
- All students in need of intervention are being served.
- Strategies and programs are being implemented as designed and for the amount of time required.
- Most students in intervention are meeting their reading progress goals as evidenced by their Progress Monitoring Reports.
- Students who have moved out of intervention are maintaining their gains.

Taking another look at our example on p. 39, we see that this team of teachers also met their mid-year goal for struggling students by reducing the number of students in the Intervention and Urgent Intervention categories from 25 percent to 19 percent. They were happy to have reversed the downward trend they saw at mid-year and see this as evidence that the intervention strategies and programs they had implemented worked well.

Make Plans for the Next School Year

If the Screening Report shows good results, identify which strategies have worked, both within general classrooms and intervention programs. Figure out how you can continue those strategies and build upon them. Will new teachers be coming into the school? Decide how can they be trained and coached so they, too, can implement the strategies effectively.

Also identify strategies that were not effective. Was the problem with the strategies themselves or were they not implemented well? Decide if you need to improve the implementation of a strategy or abandon it for another.

Spring screening is a good time to hold cross-grade meetings as well. Teachers can then prepare for students who will be entering their classrooms the next fall.

If you are an administrator or someone involved with staffing and purchasing, consider whether you will have sufficient resources in the fall to meet student needs. Will any grades need more staff? Can staff be hired or must you move staff from one grade to another? What materials will you need?

In our example, the fifth-grade teachers, after evaluating how they did during the past year, turned to the students who will be entering their classrooms the following fall. They noticed that this group of students has a fairly high percentage in the On Watch category. Because their implementation of AR best practices was so effective, they agreed to adhere to them next year. Since they anticipate a new teacher coming in, they decided to pair her with their most skilled AR user so that she can quickly learn and apply these practices, too.

Summary

SPRING UNIVERSAL SCREENING

- Spring Universal Screening is a time to review the past school year and pre-plan for the next one.
- By analyzing the Screening Reports for fall, winter, and spring and comparing the movement of students among categories, you can judge the effectiveness of core instruction and intervention strategies.
- When pre-planning for the next school year, decide which strategies to keep, which to abandon, and which to improve. Determine how to allocate resources to meet next year's needs.

6

Common Questions

Do my students need to be supervised while they take a STAR test?
Yes! For results to be valid, STAR Reading must be administered consistently. A standard administration ensures that results can be compared to norms. Every time students take the test, the test administrator must follow the pretest instructions that are included in the software and create a testing environment free of distractions.

I test my intervention students every week and am seeing some of the same questions repeated. Does this invalidate the test?
The questions you see repeated are in the practice section, which precedes the test. If you test students frequently, some of these questions may be repeated since the bank of items for the practice section is relatively small. However, answers to practice questions do not affect students' scores.

Sometimes my students accidently close the Web browser and the test disappears. Is there a way to go back in or do they have to start the test over?
If students close the Web browser or otherwise lose connection to the server, they can log in again and resume the test where they left off. However, they can resume an unfinished test only once, and it must be done within 48 hours. After students log in again, they will see a message to click the Start button to restart the test. After clicking, a dialog box opens and you will need to enter the monitor password.

What should I do if a test is interrupted by a fire drill or some other unexpected event, and we can't reschedule it right away?
You can stop a student's test by pressing Ctrl+A (Windows) or control+A (Macintosh). Then you must enter the monitor password. If a test is purposefully stopped (rather than closed accidentally or through a lost connection), the student cannot complete it later. The student can, however, take a new test. STAR Reading will not record a score for the stopped test.

Is it okay to retest a student if I know he or she can do better?
Yes, if you know a student has rushed through a test or not taken it seriously. If the student retests before midnight, only the most recent test data will be used in score calculations and show up on reports. (The exception is the Test Record Report, which displays a history of all tests.) However, if a student retests after midnight, the second test will be treated as a separate test. If a student tests more than once during a screening period, data from the last test taken is shown on reports.

I intervene with students one-on-one. Do I need to create a separate group for each student?
No. In this case, you can create one group with a title such as "Individual tutoring" and add all the students to that group. This will make it convenient for you to view and print reports.

Why can't the software automatically set a goal for each student in my intervention group?

For a goal to be appropriate, it must be individualized. It's critical that you take into account each student's academic history, experience with previous interventions, and other unique characteristics, such as English language proficiency, as well as the intensity of the planned intervention. While the software "knows" the growth rates achieved by students performing at a similar level of reading proficiency, only you know these other factors and how they may influence a student's growth.

Why doesn't STAR Reading show me the specific reading skills with which a student is having trouble?

Reading is a dynamic process involving many interacting skills. It's like riding a bicycle. If you want to know how well a child can ride a two-wheeler, you don't give her separate tests on braking, steering, and pedaling. You put her on the bike and let her go. In a similar manner, STAR Reading gives you information on a student's ability to put all skills together in the genuine act of reading. When you need more specific information, such as whether or not a student knows certain sound-letter correspondences, gather that from additional tests.

I have a kindergarten student who can read independently. Can I give her a STAR Reading test?

Yes, but not all scores will be reported. Because kindergarten students were not in the norming sample, STAR Reading cannot provide norm-referenced scores such as percentile rank. However, it will provide scaled scores, instructional reading levels, grade-equivalent scores, and ZPDs.

I teach an evening class of high-school dropouts. What grade level do I indicate for them?

The purpose of entering a grade level is to make sure a student is not immediately frustrated by items that are too difficult. If you can estimate the student's reading level, enter that grade. Otherwise, a good rule of thumb is to enter the last grade in which the student was enrolled.

Why can't I see which questions a student missed?

With computer-adaptive tests, the student's performance on individual items is not as meaningful as the pattern of responses to the entire test. See pp. 5-7 for an explanation of how STAR Reading test scores are calculated.

Where is the "wizard" that I use to set goals for my intervention students?

On the Renaissance Place Home page, scroll to the STAR Reading tab and click Screening, Progress Monitoring & Intervention. Then follow the instructions in the appendix for defining interventions and goals.

I've clicked on Reports under the STAR Reading tab, but I don't see the Screening and Student Progress Monitoring reports. Where are they?

To access these reports, go to the Renaissance Place Home page, scroll to the STAR Reading tab, and click Screening, Progress Monitoring & Intervention. Then follow the instructions in the appendix for viewing and printing reports.

I use Accelerated Reader and set individual goals for my students there. Do I need to set goals in STAR Reading, too?

In Accelerated Reader software you set goals for the quantity, quality, and

difficulty of a student's independent reading practice. These are marking-period goals that ensure students get an appropriate amount of practice at the right level of difficulty, and we recommend that you set these goals with every student. STAR Reading goals are different. They are goals for overall reading proficiency and are usually set only for students in intervention. Because the intent is to measure the efficacy of an intervention, they are not shared with students.

Why don't I set a progress goal for every student?
The purpose for setting a goal is to measure a student's response to an intervention. You set a goal, you prescribe an intervention, and then you evaluate the effectiveness of the intervention by seeing whether or not the student is making progress toward the goal. Therefore, you only set goals for students in intervention.

Appendix

Instructions for Common Software Tasks

Before Testing

Log in to STAR Reading as a Teacher/Administrator and Locate Pretest Instructions, and Enter a Monitor Password

1. On the Welcome page, click **Teacher/Administrator**.
2. Enter your user name and password.
3. On the Renaissance Place Home page, scroll to STAR Reading and click **Resources**. Click **Pretest Instructions**.
4. To print, click the Adobe Reader printer icon.
5. Close and click **Done**.
6. If you wish to change the default setting for the monitor password (which is ADMIN), scroll to STAR Reading and click **Preferences**.
7. Select your school and class. Click **Testing Password** and enter a new monitor password.
8. Click **Save**.

Identify Students' User Names and Passwords

1. On the Renaissance Place Home Page, scroll to STAR Reading and click **Reports**.
2. If asked, select your school.
3. Under "Other Reports," select **Student Information**.
4. Select options and click **View Report**.
5. To print, click the Adobe Reader printer icon.

Log into STAR Reading as a Student and Take a Test

1. On the Welcome page, click **Student**.
2. Enter a user name and password.
3. Under STAR Reading, click **Take a Test**.
4. Click **Start**. Enter the monitor password.
5. Abort the test with **Ctrl A** (Windows) or **Open Apple A** (Macintosh).

Adjust a Student's Starting Level and/or Adjust Time Limits

1. On the Renaissance Place Home page, scroll to STAR Reading and click **Student Settings.**
2. If necessary, select your school and class, and click **Edit**.
3. To set an estimated instructional reading level, type it in the blank box next to the student's name.
4. To extend the time limit for answering test questions, click the box in front of "On."
5. Click **Save**.

View Screening Dates

1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. If necessary, choose your school. In the gray sidebar on the left side of the screen, click **Screening Dates**.
3. View the dates and click **Done**.

Add or Edit Screening Dates
You must have administrator access to do this task.
4. On the Renaissance Place Home Page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
5. Choose your school. In the gray sidebar on the left side of the screen, click **Screening Dates**.
6. To change the name of an existing screening date, delete the current name and type in a new one.
7. To change a screening date, click the date and type in a new one.
8. To add a screening date, click **Add Screening Dates**. Add the information in the new row.
9. To remove a screening date, click **Remove** at the end of the row.
10. Click **Save**.

View Cut Scores
1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. In the gray sidebar on the left side of the screen, click **Cut Score Categories**. (This link is disabled if the school has not set screening dates.)
3. If necessary, select your school and grade.
4. View the scores and click **Done**.

Edit Cut Scores
You must have administrator access and enter screening dates before you can do this task.
1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. In the gray sidebar on the left side of the screen, click **Cut Score Categories**.
3. Select a school and grade. Next to "Set Cut Score by," choose how you want to edit the cut scores.
4. If you chose national percentile rank (PR), use the drop-down lists in the left-hand column of the table to select new PR values.
5. If you chose scaled scores, enter the target date. In the right-hand column of the table, enter new score values.
6. Click **Update Preview** and click **Save**.

During Testing

Check the Number of Students Screened and Preview Results to Date
1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. Choose the school you wish to view, and review the bar graph under Screening Status.
3. Click **Preview** to see a summary of the results so far. The preview feature is active for 30 days after the end of the screening period.

Working with Groups

Create an Intervention Group
1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.

2. If necessary, choose your school. In the gray sidebar on the left side of the screen, click **Manage Groups**.
3. Click **Create Group**.
4. Enter the name of the group.
5. Assign personnel. Use the drop-down list to assign one person. To assign more than one person, click **Select Multiple Personnel** and click the boxes in front of the names.
6. Select the programs the group will be using by clicking the boxes.
7. You may describe the group in the blank box next to "Description."
8. Click **Save**.

Add or Remove Students from a Group

1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. If necessary, choose your school. In the gray sidebar on the left side of the screen, click **Manage Groups**.
3. Click **Add/Remove Students** next to the name of the group.
4. To add a student, enter student information under "Search for Student" and click **Search**. Select students by clicking the boxes in front of the students' names. Click **Add**.
5. To remove a student, click **Remove** next to the student's name. Click **Remove All** to remove all students.
6. Click **Save**.

Defining Interventions and Goals

Set Up a New Intervention and Goal

A student must take a STAR test before you can define an intervention and goal.

1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. If necessary, choose your school. If you are within a screening period, click **Progress Monitoring & Goals**. Otherwise, go to the next step.
3. To select a student, enter student information under "Search for Student" and click **Search**. Click the student's name.
4. Under the student's test information, click **Set up intervention and goal for progress monitoring.**
5. Type the name of the intervention
6. Specify the goal end date by typing it in or clicking the calendar and choosing a date.
7. Beginning in spring 2010, you may choose a starting test. (The default is the most recent test taken.)
8. Select the goal type by clicking the button in front of "Moderate" or "Ambitious," or define a custom goal.
9. To define a custom goal, use the drop-down list to choose Growth Rate, Scaled Score, or Percentile Rank. Enter the number you would like the student to reach by the end of the intervention period. Click **Calculate Goal** to translate that number to a weekly growth rate.
10. Click **Save**.

Change the Duration or Goal of an Existing Intervention

1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. Choose your school. Next to "View," click **Progress Monitoring & Goals**.

3. To select a student, enter student information under "Search for Student" and click **Search**. Click the student's name.
4. Under the student's test information, click **Edit intervention and Goal**.
5. Next to "Goal End Date," type in a new date or click the calendar and choose a date.
6. Select the new goal type by clicking the button in front of "Moderate" or "Ambitious," or define a custom goal.
7. To define a custom goal, use the drop-down list to choose Growth Rate, Scaled Score, or Percentile Rank. Enter the number you would like the student to reach by the end of the intervention period. Click **Calculate Goal** to translate that number to a weekly growth rate.
8. Click **Save**.

Viewing and Printing Reports

Create and Print a Screening Report
1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. Select your school. Under "Reports" in the gray sidebar on the left side of the screen, click **Screening**.
3. Select reporting options and click **View Report**.
4. To print, click the Adobe Reader printer icon.

Reprint a Screening Report from a Previous Screening Period
1. On the Renaissance Place Home page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. Select your school. Under "Reports" in the gray sidebar on the left side of the screen, click **Screening**.
3. Select reporting options. Use the drop-down menu next to Reporting Period to select a previous screening period. Click **View Report**.
4. To print, click the Adobe Reader printer icon.

Create and Print a Student Progress Monitoring Report
1. On the Renaissance Place Home Page, scroll to STAR Reading and click **Screening, Progress Monitoring & Intervention**.
2. Select your school. Under "Reports" in the gray sidebar on the left side of the screen, click **Progress Monitoring**.
3. Select reporting options and click **View Report**.
4. To print, click the Adobe Reader printer icon.

View and Print Other Reports
1. On the Renaissance Place Home page, scroll to STAR Reading and click **Reports**.
2. Select your school and class.
3. Click the name of the report you wish to view or print.
4. Select reporting options. Generally, you will select either an individual student or a group. The date range is usually either the period during which a student has been in intervention or a fixed period, such as a semester. Click **View Report**.
5. To print, click the Adobe Reader printer icon.

AR Goal-Setting Chart
for Guided Independent Reading Practice

If you use Accelerated Reader with your students, this chart will help you individualize their independent reading practice.

Identify ZPD

Identify each student's grade-equivalent (GE) score with a standardized assessment, such as STAR Reading, or estimate a GE based on the student's past performance. The corresponding ZPD is a recommended book-level range for the student. If books in that range seem too hard or easy for a student, choose a new range or create a wider one that better matches the student's abilities.

Set Goals

Average percent correct—The most important goal for all students is to average 85% or higher on Reading Practice Quizzes. Meeting this goal has significant impact on reading growth. Averages of 90% and higher are associated with even greater gains. If a student struggles to maintain the minimum average, talk to the student and find out why. Then decide on a strategy that will lead to success.

Point goals—The chart shows the number of points students are expected to earn based on GE and time spent reading. These are estimates—set goals that are realistic for individual students.

Grade-Equivalent Score	Suggested ZPD	60 Min. Daily Practice			30 Min. Daily Practice			20 Min. Daily Practice		
		Points per Week	Points per 6 Weeks	Points per 9 Weeks	Points per Week	Points per 6 Weeks	Points per 9 Weeks	Points per Week	Points per 6 Weeks	Points per 9 Weeks
1.0	1.0 – 2.0	1.7	10	15	0.9	5.0	7.5	0.6	3.3	5.0
1.5	1.5 – 2.5	1.9	11	17	1.0	5.5	8.5	0.6	3.7	5.7
2.0	2.0 – 3.0	2.1	13	19	1.1	6.5	9.5	0.7	4.3	6.3
2.5	2.3 – 3.3	2.3	14	21	1.2	7.0	10.5	0.8	4.7	7.0
3.0	2.6 – 3.6	2.5	15	23	1.3	7.5	11.5	0.8	5.0	7.7
3.5	2.8 – 4.0	2.7	16	24	1.4	8.0	12.0	0.9	5.3	8.0
4.0	3.0 – 4.5	2.8	17	25	1.4	8.5	12.5	0.9	5.7	8.3
4.5	3.2 – 5.0	3.2	19	29	1.6	9.5	14.5	1.0	6.3	9.7
5.0	3.4 – 5.4	3.5	21	32	1.8	10.5	16.0	1.2	7.0	10.7
5.5	3.7 – 5.7	3.9	23	35	2.0	11.5	17.5	1.3	7.7	11.7
6.0	4.0 – 6.1	4.2	25	39	2.1	12.5	19.5	1.4	8.3	13.0
6.5	4.2 – 6.5	4.6	28	41	2.3	14	20.5	1.5	9.3	13.7
7.0	4.3 – 7.0	4.9	29	44	2.5	14.5	22.0	1.6	9.7	14.7
7.5	4.4 – 7.5	5.3	32	48	2.7	16.0	24.0	1.8	10.7	16.0
8.0	4.5 – 8.0	5.6	34	50	2.8	17.0	25.0	1.9	11.3	16.7
9.0	4.6 – 9.0	6.3	38	57	3.2	19.0	28.5	2.1	12.7	19.0
10.0	4.7 – 10.0	6.9	41	62	3.5	20.5	31.0	2.3	13.7	20.7
11.0	4.8 – 11.0	7.6	46	68	3.8	23.0	34.0	2.5	15.3	22.7
12.0	4.9 – 12.0	8.3	50	75	4.2	25.0	37.5	2.8	16.7	25.0

Sample Letter to Parents for an RTI Program

Dear Parent or Guardian,

We have recently completed the benchmark testing that is required by the Response to Intervention program. This assessment is designed to identify whether your child is ready to read on grade level (Tier 1) or whether your child needs additional and/or more intensive reading instruction (Tier 2 or Tier 3). All students in the school will be placed into a skill group in Tier 1, 2, or 3 for a minimum of four cycle days a week. The results of the benchmark testing indicate that your child would benefit from placement in:

_____Tier 1: REGULAR CURRICULUM + enrichment activities

_____Tier 2: REGULAR CURRICULUM + additional instruction

_____Tier 3: REGULAR CURRICULUM + additional, more intensive support

Your child will be placed in a **(name of intervention program)** skill group starting on **(date of start of skill groups)**. This group will work on the following skill(s):

_____ **Early Literacy Skills:** This means the skills needed to begin to learn to read. This includes knowing the names and sounds of letters, understanding rhyming, and recognition of the beginning sounds in words. These skills are important because they are necessary before children can learn to read.

_____ **Decoding:** This means being able to recognize and sound out words. This is important because it is the foundation of reading.

_____ **Fluency:** This means reading quickly with few mistakes. This skill is important because students need to be able to read fluently to help them understand what they read.

_____ **Comprehension:** This means understanding what was read. This skill is important because the main purpose of reading is to comprehend.

_____ **Enrichment Activities:** This means activities that enhance the regular curriculum and expand on information and skills already mastered. This is important for students who have met grade-level goals so that they continue to improve and learn.

During the school year the staff will continue to monitor the progress of your child and you will be notified of the results and recommendations.

If you have any questions about this assessment or the recommendation, kindly contact me. Thank you for your continued interest in your child's school success.

Sincerely,

School Principal

Reproducible Form

STAR Reading Reports

Below is a list of all the reports available with STAR Reading. For more details about each report, why you would use it, and customization options, see the software manual.

Annual Progress	Provides a graphic display of the reading progress of a student or class across a school year in comparison to a National Norm Reference.
Class	Lists STAR Reading classes, their teachers, and their students.
Diagnostic	Includes an individual student's most recent test scores, an assessment of skills, and recommendations.
Enrollment	Lists students and their ID, grade, class, teacher, and time limit for questions.
Group Performance	Provides a graphic display of how groups of students are progressing toward proficiency based on their STAR Reading tests. Available only to customers in states participating in the Council of Chief State School Officers (CCSSO) Renaissance Learning R&D consortium.
Growth	Provides each student's scores for a pre- and posttest, along with the mean pre- and posttest scores for the group of students included on the report.
Parent	Gives parents their child's most recent test scores, provides definitions of the scores, and notes how the teacher can use the scores.
Reading Range	Suggests an initial zone of proximal development (ZPD) for each student included on the report. Used in conjunction with Accelerated Reader.
Registration	Lists students who are registered for testing and their estimated IRL, time limit on questions, user name and password, and other identifying information. Only relevant for schools requiring registration before testing.
Screening	Provides a graph that shows the distribution of students within a grade across the following categories: At/Above Benchmark, On Watch, Intervention, and Urgent Intervention.
Snapshot	Provides a list of students and their scores on a single test, along with the class's PR distribution and IRL distribution.
Student Detail	Provides the ID, gender, date of birth, grade level, ethnicity, and characteristics for each student included in the report.
Student Information	Provides the ID, gender, date of birth, estimated Instructional Reading Level, time limit for questions, user name, and password for each student included in the report.
Student Performance	Provides a graphic display of how individual students are progressing toward proficiency based on their STAR Reading tests. Available only to customers in states participating in the Council of Chief State School Officers (CCSSO) Renaissance Learning R&D consortium.
Student Progress Monitoring	Provides a graphic display of an individual student's progress toward a goal and uses a trend line to show projected growth.
Summary	Provides scores for all students included on the report, along with the PR distribution, the IRL distribution, and the GE distribution.
Teacher	Lists teachers using STAR Reading, their user names, classes, and class position.
Test Activity	Shows which students have and have not completed a STAR Reading test.
Test Record	Provides a complete history of a student's STAR Reading tests and scores.

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About Renaissance Learning

Renaissance Learning, Inc. is a leading provider of technology-based school improvement and student assessment programs for K12 schools. Adopted by more than 72,000 schools, Renaissance Learning's tools provide daily formative assessment and periodic progress-monitoring technology to enhance core curriculum, support differentiated instruction, and personalize practice in reading, writing, and math. Renaissance Learning products help educators make the practice component of their existing curriculum more effective by providing tools to personalize practice and easily manage the daily activities for students of all levels. As a result, teachers using Renaissance Learning products accelerate learning, get more satisfaction from teaching, and help students achieve higher test scores on state and national tests. Renaissance Learning has seven U.S. locations and subsidiaries in Canada and the United Kingdom.

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