

Case Study #2-Cedric

Grade Seven: Reading Comprehension

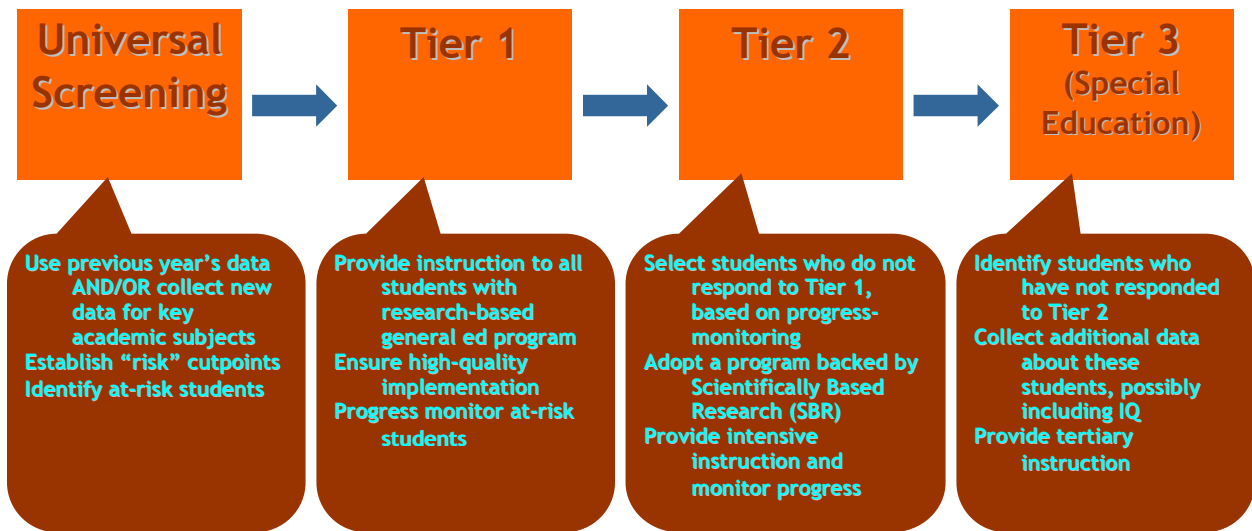
Grade Seven: Reading Comprehension

Response To Intervention in the Washington County Public Schools

In this case study, we will learn about a fictional classroom, school, district, and curricula. The classroom belongs to Mr. Amante, the school is George Washington Carver Middle School, and the school district is the Washington County Public School (WCPS) system. The WCPS is a fictional suburban school district in an eastern state. WCPS serves about 20,000 students in Grades K through 12. Although the district is suburban, it serves students with a wide range of socioeconomic circumstances.

RTI Design in Washington County Public Schools (WCPS)

WCPS decided to use the well-researched three-tier model of RTI with a standard protocol intervention strategy shown in the figure below.¹ In the three-tier model, the bottom tier is called “Tier I.” This is core instruction all students receive. The next tier, called “Tier II” is for students who do not do well in the core curriculum. Finally, for those few students who do not respond to Tier II interventions, there is tertiary intervention, highly specialized instruction conducted in special education. Here is how WCPS designed their standard protocol RTI model.



Overview of the Three-Tier RTI Model used at WCPS

Universal screening. The first step in Response To Intervention (RTI) is to determine which students might need special interventions. In WCPS, all students are tested using curriculum-based measurement (CBM), a short, simple test of key grade level skills. The type of

¹ The standard protocol approach is in contrast to an alternative approach called problem solving, in which instructional intervention strategies tend to be more individualized to the needs of each student

CBM used varied by grade level. In Grade 7 classrooms, the CBM Maze fluency and comprehension assessment is frequently used in this way. The Maze, which we will describe in more detail below, allows students 3 minutes to circle the correct words to fill in blanks throughout a grade-level passage. Students whose scores fall below specific cutoff points are considered “at risk,” and their progress is monitored using different equivalent forms of the same CBM measure for the next 6 to 8 weeks.

Tier I. All students participate in the core program, a research-based general education curriculum. During this time, the at-risk students participate in preventative programs and their progress is monitored weekly.

Tier II. After 6-8 weeks in the general education preventative program, the progress of at-risk students is examined. If students have not made adequate progress, they are placed in a secondary intervention program. This instruction takes place outside of core instructional time (e.g., not during primary math or reading time) and it is the responsibility of general educators.

Tier II interventions occurs for approximately 8 weeks. The progress of students in secondary intervention programs is tracked using CBM measures. At the end of an 8 week cycle, the CBM data are examined. Students who make adequate progress return to Tier I, the core curriculum instruction. Those who do not may participate in a second round of secondary prevention or they may be referred for placement in tertiary intervention (in this model, special education).

Tier III. At this point, students may undergo a more formal psychometric evaluation to determine the scope and extent of their deficits. Once the deficits are understood, students receive more intensive one-on-one instruction. If a student continues to make inadequate progress, the student receives a more comprehensive and formal evaluation to pinpoint specific strengths and weaknesses.

Details of the WCPS RTI Model

Tier I. A critical aspect of general education core literacy curriculum is that instruction is evidence-based. Selecting a core curriculum was one of the most important decisions WCPS had to make. The district knew that they needed a program that had a strong track record of success and that covered all critical literacy skills. They began by identifying the key literacy skills they wanted to make sure the program included. They consulted the National Reading Panel report (National Institute of Child Health and Human Development, 2000)² and determined that phonological awareness, phonics, fluency, comprehension, and vocabulary were key reading skills. They also knew that they wanted a program that covered writing strategies, handwriting, spelling, and grammar.

As they examined programs, they consulted several sources of information about the effectiveness of language arts programs. They used reports from the U.S. Department of

² Information about the National Reading Panel is available at its website, <http://www.nationalreadingpanel.org>. The complete report, as well as summaries of the major findings, are available there.

Education's What Works Clearinghouse (<http://whatworks.ed.gov>), the Florida Center for Reading Research (<http://www.fcrr.org/FCRRReports/>), Johns Hopkins University's Best Evidence Encyclopedia (<http://www.bestevidence.org/>), and the Oregon Reading First Center (http://reading.uoregon.edu/curricula/or_rfc_review_2.php) to see if the programs had evidence of success.

The core language arts program chosen was called *Reading Adventures*.³ They chose *Reading Adventures* because the independent websites they consulted stated that it had a prior track record of success. *Reading Adventures* also covered all of the literacy skills the district decided were important. The district has been using *Reading Adventures* at all middle school levels for four years.

Inadequate progress in general education core curriculum. Even when teachers do the most effective job possible teaching reading, some students will still not respond to instruction. For this reason, it is important to figure out which students are struggling. To do this, schools begin the year by doing a universal screening of all students using a short assessment of grade-appropriate reading skills. The schools then identify students who are at risk for reading difficulty based on their level, relative to grade level expectations.

The schools then do Progress Monitoring (PM) for the students who are at risk. For the first 6 to 8 weeks of school, at-risk students take a weekly PM assessment. If students do not make adequate progress, they begin secondary prevention.

Tier II. Tier II, secondary intervention, is part of general education. WCPS has hired reading specialists for each of their middle schools. These reading specialists provide secondary instruction to students. Instruction is provided in groups of 5-7 students four times a week for 30 to 45 minutes. WCPS has mandated that secondary instruction occur outside of "core instructional time" (meaning reading and math), so students work with the reading specialist in addition to, not instead of, core reading or math instruction. Throughout secondary interventions (Tier II), the reading specialists continue to do PM assessment with these students. They now do PM more often, usually twice a week.

The choice of an evidence-based secondary intervention (Tier II) curriculum was critical to the success of RTI in WCPS. For core instruction, *Reading Adventures* worked well in the first year of implementation, teachers reported that they noticed a positive difference in student performance, and state test scores rose for Grades 5 and 6. The Special Education Department did notice a slight drop in referrals, but *Reading Adventures* did not solve all of the district's problems with reading. At this point, WCPS purchased a supplemental fluency program called *Fantastic Phonics* and concurrently started to implement RTI. As a result of these steps, far fewer children were being referred to special education and many more were meeting grade-level standards.

³ *Reading Adventures* is not a real language arts program, but many programs like this can be found on the What Works Clearinghouse website. It lists beginning reading programs and states how successful they are at improving phonological awareness, phonics, fluency, comprehension, and overall reading, based on experimental research. The Florida Center for Reading Research and Oregon Reading First websites also have extensive information about many language arts programs, but they do not describe the history of research for the programs.

This was not, however, helping with a new problem schools were noticing. A number of students who did well in Grades 4 and 5 were no longer doing well in Grades 6 and 7. The issue had shifted, however. The district noticed that these older struggling students had been competent readers in the earlier grades because their scores on word reading and passage reading fluency CBM were above the benchmark. Now, the district realized that these students might be struggling for two different reasons. First, some students exhibited what are called “late emerging decoding problems.” That is, these students were able to handle the decoding demands of lower grade texts, but the increasing number of multiple syllable words in grade 4 and grade 5 texts has strained their basic decoding skills. Their word identification and fluency skills have both stalled—and even declined. Second, another group of students continued to decode well and read fluently, but their comprehension skills were very weak. Fortunately, there were far fewer struggling readers than before WCPS started RTI. Unfortunately, the district’s approach to secondary intervention was not designed to handle these problems.

To create effective secondary instruction for these students, WCPS decided they needed two different programs, one for those struggling with decoding and one for those struggling with comprehension. To help students with advanced decoding problems, WCPS found that *Fantastic Phonics* had a separate program designed specifically for older readers struggling with more complex words. This program, called *Fantastic Fluency*, focused on multiple syllable decoding and fluency building. The curriculum task force examined the effectiveness of the program by using the What Works Clearinghouse website and found that it had a prior track record of success. They decided it would be perfect.

Helping students with comprehension problems proved more difficult, however. There were no programs available for this problem alone. WCPS considered building their own comprehension-focused program, but they worried that this would violate a key principle of the standard protocol RTI model, that it should include a *standardized* secondary intervention curriculum with prior evidence of success. The absence of such programs, however, left them with the choice of creating their own intervention or providing no support. They opted, of course, for the former option and created 8 week, 32 lesson, secondary prevention programs for Grade 6 and Grade 7 students. They called this intervention “Reading For Meaning.”

The WCPS program writers knew it was critical that Reading For Meaning incorporate known best practices. To do this, they first decided that they would use supplemental reading materials provided with *Reading Adventures* as the core literature source for the comprehension intervention. These texts were on the same topics as the instructional units in *Reading Adventures* (e.g., “Lending a Helping Hand” was a Grade 7 unit on volunteering and community activism; a set of leveled reading books provided below-level texts) and explored different aspects of similar topics. Second, the program writing team decided to focus on the aspects of strong comprehension instruction identified by the National Reading Panel (NRP) report, namely (a) reading strategy use, (b) vocabulary instruction, and (c) fluency building. By relying on known best practices, they felt that their program, although unique, reflected the spirit of the standard protocol.

In the WCPS RTI model, students' PM data are examined again after 8 weeks of secondary instruction. For students who showed strong growth in secondary intervention, core instruction is all that is needed. For students who showed weak growth in secondary intervention, there are options: JCPS permitted some students to get a second round of secondary instruction, if they showed some—but inadequate—growth in the first round; or if those students who made little or no growth in the first secondary intervention would be referred for a special education evaluation.

In addition, after the 8 weeks of secondary intervention have elapsed, the universal screening is conducted again for all students. After the midyear universal screening, students who demonstrated inadequate progress from the beginning to the middle of the year qualify for secondary intervention. Reading specialists begin this instruction with them.

Students who do not respond to secondary intervention instruction (Tier II) are referred to special education. If these students qualify for special education services, they receive tertiary intervention from the special education teacher. Tertiary intervention instruction is designed to be matched very closely to the needs of students and is conducted one-on-one or in very small groups. Students' individualized education programs (IEPs) are written to ensure students get exactly the instruction they require.

An Introduction to Mr. Amante's Class

About Mr. Amante and His Students

Mr. Amante has been teaching Grade 7 in The Washington County Public Schools for 9 years, 7 of them at Carver Middle School. Like all of the other teachers at Carver, Mr. Amante began using RTI three years ago. Mr. Amante has noticed fewer readers with serious reading difficulties since the beginning of RTI. However, he has also noticed that there are those students who struggle with longer words and those who are not grasping the meaning of texts.

Mr. Amante has 26 students this year, and they reflect the ethnic diversity of the school. About 60% of students qualify for free or reduced price lunch. He has some English Language Learners (ELLs), but most of them are considered proficient, having learned English throughout elementary school.

Mr. Amante's Classroom

Mr. Amante makes extensive use of *Reading Adventures* curriculum. WCPS mandates that all Grade 7 teachers use the program for 45 minutes each day and follow a pacing guide. The pacing guide gives teachers benchmark dates by which they must complete certain lessons. Mr. Amante thinks the pacing guide has benefits and drawbacks. One benefit of the pacing guide is that it keeps him moving and assures that students are getting a rigorous curriculum.

On the other hand, he feels that the pacing guide limits his ability to reteach particularly challenging lessons. Mr. Amante uses the unit themes as the focal point of his classroom, but he wishes he had more time to examine themes in more detail.

Reading Adventures is tied to state standards, and Mr. Amante is pleased with the progress many of his students made across the four years he has been teaching it. The program includes reading comprehension, vocabulary, fluency, and writing lessons. One disadvantage of the Grade 7 program had been the absence of tools to track students' progress. Mr. Amante has always had high expectations for students' comprehension improvement, but he has found the end-of-unit tests too specific to give him a sense of their overall improvement. A great benefit of the introduction of RTI, therefore, has been the introduction of progress monitoring tools. WCPS now requires all Grade 7 teachers to measure students' academic progress using a curriculum-based measurement (CBM) called the Maze.

Now that we know a little bit about WCPS, George Washington Carver Middle School, and Mr. Amante, let's take a look at how Mr. Amante implements RTI. Because of the district's new focus on improving outcomes for students with late-emerging reading problems, this is a good place to take a snapshot of the process. We'll get to see how progress monitoring and RTI work together across the entire year.

Mr. Amante Begins the Year

Beginning of the Year CBM Screening

WCPS requires that all Grade 7 students are screened three times a year using the CBM Maze. This is the universal screening. Students' results on the Maze will be used to determine if Mr. Amante's students are on track to meet grade level benchmarks for reading comprehension. Each student will complete two separate Maze passages.

In some grades, it takes a lot of time to complete the screening assessments because they must be administered individually. The Maze, however, can be administered whole group, so it takes Mr. Amante very little instructional time.

To administer the Maze, Mr. Amante gives each student a passage containing spaces where students have to select the correct word from three choices, shown between brackets and in bold print. It looks like this:

THE CAVE TRIP

Mrs. Jones said that Cindy's class [**was/ step/ hill**] going on a field trip. The [**stare/ class/ green**] of third graders had never been [**be/ on/ so**] a field trip before. Cindy was [**bed/ went/ very**] excited. Mrs. Jones said that the [**class/ chair/ peach**] was going on a field trip [**at/ to/ is**] see the caves up in the mountains. [**Show/ And/ The**] class had been studying about caves [**for/ sad/ kill**] the last few weeks. Cindy [**wet/ and/ ill**] her classmates had seen pictures of [**shout/ caves/ sing**]. Now, they were going to see [**a/ are/ or**] real cave.

A week later, the students [**then/ her/ and**] Mrs. Jones climbed onto a bus [**four/ that/ dime**] would take them to [**and/ the/ sat**] cave. It was early in the morning [**sit/ tap/ and**] the air was chilly. Mrs. Jones [**got/ sat/ had**] warned all of the students to [**bring/ pillow/ horse**] a sweater because the air might [**be/ to/ it**] chilly in the cave. Cindy was [**work/ jump/ very**] glad that she had brought her sweater.

[**Rain/ Halt/ The**] bus driver started the engine and [**the/ was/ got**] bus began to roll. The bus [**rolled/ mother/ girls**] along the freeway. Finally the bus [**lather/ coffee/ pulled**] onto a little country road that [**ate/ led/ pear**] to the cave.

When the students arrived at the [**goat/ math/ cave**], all they could [**see/ kite/ lot**] was a mountain with a big [**toys/ trees/ black**] hole in the side.

Mr. Amante wants to be sure he gives the test the same way every time.

To be sure his administration is consistent, he reads the following script every time he gives the Maze:

*The teacher says: **Whenever you come to three words in parentheses and underlined, circle the word that belongs in the sentence. Choose a word even if you're not sure of the answer. When I tell you to start, pick up your pencil, turn you test over, and begin working.***

At the end of 3 minutes, I'll tell you to stop working. Remember, do your best. Any questions? Start. Trigger the timer for 3 minutes.

Mr. Amante has an answer key for the Maze, and he uses this to check students' scores. It looks like this:

SUMMER CAMP

Stuart has nice parents. They did not embarrass him in [glad/ front/ yellow] of his friends. His father did [not/ ant/ soft] yell at him during his baseball [center/ games/ lines], and his mother never kissed him [in/ tot/ put] front of his friends. He generally [liked/ flow/ jeep] his parents, except for the fact [shoe/ went/ that] they were sending him to summer [bus/ dump/ camp] this year.

Stuart did not want [to/ wit/ cow] go to summer camp. The thought [and/ be/ of] it made him picture himself hot [coat/ rest/ and] thirsty, hiking up a dusty trail. [Bit/ He/ Go] knew that summer camp food had [of/ to/ my] be bad news, too. Besides, summer [camp/ free/ dog] was for people with nothing else [fad/ to/ sew] do. He had plenty of things planned [for/ much/ very] his summer at home.

“Summer camp [will/ yes/ belt] be good for you,” said Mother. “[Feel/ And/ Lot] I don’t want to hear another [catch/ phone/ word] about it!” Stuart moped around the [beat/ opens/ house] until it was time to go. Mother [had/ with/ boy] packed his trunk full of clothes, [and/ sort/ time] she and Dad took Stuart to [real/ glob/ the] bus station. Stuart tried hard not [to/ sun/ we] cry when he hugged them goodbye. [Yet/ He/ Sat] ran onto the bus and buried [beam/ his/ neat] head in his hands. After a [while/ tall/ hate], he looked out the window.

Mr. Amante gives students one point for each correctly circled word.

Mr. Amante administers *two* CBM Maze passages to his students. There are two ways he can do this, and both have advantages and disadvantages:

1. Have his students do two Maze passages on the same day.
 - a. Advantages: It takes less time. Mr. Amante also gets a sense of how his students are doing at one point in time.

- b. Disadvantage: If students are having a bad day, this will decrease their performance on both passages.
- 2. Have his students do one Maze the first week of testing and the other the next week.
 - a. Advantage: If students did poorly the first time because they were having a bad day, a second administration on a different day would probably result in a higher score and limit the impact of the bad day.
 - b. Disadvantage: It takes more time.

Scoring Beginning of the Year CBM

After he has completed all of his testing, Mr. Amante scores all of the assessments. He counts every correctly circled response and writes the score on the top of the page and on a record sheet. This is the student’s score for that CBM Maze.

Once he has scored all the tests, Mr. Amante has a complete record for all students, as you see below:

Student	Screening 1 List 2	Screening 1 List 2	Screening 1 Average	Screening 2 List 1	Screening 2 List 2	Screening 2 Average	Screening 3 List 1	Screening 3 List 2	Screening 3 Average
Aaron	17	15	16						
Brenda	10	12	11						
Cedric	9	10	10						
Daniela	27	28	28						
Emily	13	13	13						
Francisco	26	24	25						
Gracie	21	20	21						
Hugo	15	16	15						
Isaac	13	14	14						
Jacqueline	27	27	27						
Katherine	11	15	13						
Leslie	14	14	14						
Michael	20	21	21						
Natasha	23	21	22						
Oscar	22	22	22						
Paige	17	15	16						
Quinn	11	13	12						
Roman	10	11	11						
Savannah	23	23	23						
Terrence	21	22	22						
Ulises	15	14	15						
Victoria	15	18	17						
Wendy	24	22	23						
Xavier	8	8	8						
Yasmin	10	8	9						
Zachary	9	7	8						

Notice that there are a lot of blank columns on the sheet. These columns are for Mr. Amante to use for later universal screenings.

Mr. Amante also reviewed his students’ previous spring ISAT scores in the area of reading:

	First Name	ISAT RIT	Proficiency Level
	Aaron	217	Proficient
	Brenda	209	Proficient
	Cedric		No Score Available
	Daniela	225	Advanced
	Emily	205	Basic
	Francisco	225	Advanced
	Gracie	214	Proficient
	Hugo	213	Proficient
	Isaac	209	Proficient
	Jacqueline	225	Advanced
	Katherine	205	Basic
	Leslie	204	Basic
	Michael	218	Proficient
	Natasha	217	Proficient
	Oscar	216	Proficient
	Paige	209	Proficient
	Quinn	209	Proficient
	Roman	210	Proficient
	Savannah	213	Proficient
	Terrence	218	Proficient
	Ulises	209	Proficient
	Victoria	198	Proficient
	Wendy	214	Proficient
	Xavier	197	Below Basic
	Yasmin	202	Basic
	Zachary		No Score Available

Analyzing the Data

Now that Mr. Amante has his data, he can analyze them to see which students may need more assistance than the general education curriculum can provide. WCPS has given Mr. Amante a cut-off score to determine if students are “at-risk,” based on the recommendations of the National Center on Progress Monitoring⁴. The “at-risk” cut-off score is 14 correct CBM Maze replacements in 3 minutes (the total Maze time). In other words, if students get 14 or fewer items correct, they are considered at-risk.

Now that Mr. Amante knows which students are at-risk, he will monitor their progress for 6 to 8 weeks—administering the CBM Maze on a weekly basis—and he will continue to provide all students with core instruction. Under the standard protocol, Mr. Amante will differentiate his instruction to boost these at-risk students reading deficits.

Let's look at a few of Mr. Amante's students. Some of them are good candidates for progress monitoring, and they may respond to the good instruction Mr. Amante will give them in the next 6 to 8 weeks. Any student who scored 11, 12, or 13 on average is a good candidate for progress monitoring. Those who scored 9 or lower, here, Xavier, Yasmin, and Zachary, may need immediate intervention to ensure that they do not fall further behind during the initial progress monitoring period.

There are a couple possible explanations for the very low performance of these students. Here are some possibilities:

- These students are good decoders but very poor comprehenders. Students like this, sometimes called "word callers" because they can say the words but have little understanding of them, are relatively rare. Yasmin, for example, had no history of reading problems (she scored at the benchmark on Grade 6 passage reading fluency CBM, which measures decoding and fluency) but did very poorly on the CBM Maze, which measures comprehension and fluency. She may have this specific comprehension difficulty.
- They may not have received good instruction in the lower grades. How would this be possible if George Washington Carver Middle School had been doing RTI for three years? It would be unusual, but a student may have come from another district that is not using this approach to instruction. Zachary just moved to Washington County, and his parents already expressed concern to the Carver principal, Dr. O'Bannon. As a result of Zachary's low score and parental concern, it was decided that he would be placed immediately into secondary prevention instruction. Cedric similarly just moved to Washington County, but his score was higher and it was determined that he would just have progress monitoring initially.
- Finally, these students may already be identified as needing additional support and may already be receiving tertiary intervention services. This is the case with Xavier here. He struggled with decoding and fluency in Grade 6 and has already been receiving additional instruction outside of the classroom.

Tier I Interventions in Mr. Amante's Classroom

As we described above, Mr. Amante follows a district-provided pacing plan. He covers lessons in *Reading Adventures* according to the sequence and pace determined by the district. This year, it is going well for him. He follows the pacing guide carefully and does all of the standard lessons included in the program. In addition, he supplements the curriculum with a few additional texts because he wants to provide exposure to other types of information about each unit topic. He knows that content knowledge is very important for strong reading comprehension, and he feels his additional texts deepen content learning. He is careful not to supplement too much but does provide differentiated instruction and support to his at-risk students.

In addition to a pacing guide, the district has required the Grade 7 teachers to check each other's fidelity to the program. Mr. Amante and his colleagues have been checking their program fidelity since the first year of RTI. They were initially concerned, but they understood that it was

important to be sure that all students got similar instruction: “RTI doesn’t work if we aren’t sure everyone is getting good instruction,” they said. All of the Grade 7 teachers at George Washington Carver initially felt uncomfortable giving critical feedback to each other. They did the checks anyhow, and they found that it was helpful to observe each other because they learned new tips and tricks when they did this. They realized the value in watching each other, and they found the constructive feedback helpful for improving their implementation.

They also found the fidelity checklist—a list of items that everyone must include in their implementation—was less daunting than they expected. The curriculum department had created the fidelity checklist to emphasize the *core elements* of the program. In other words, it was not necessary for teachers to do every element of every lesson. WCPS emphasized that the lessons on reading comprehension strategies, vocabulary, and reading fluency needed to be followed carefully, and the fidelity checklist focused mostly on those lessons.

Mr. Amante credits the fidelity checks with helping him strike a better balance between what he wants to teach and what the standards require. His interest in certain subjects (e.g., conservation) sometimes meant he spent too much time on them, at the expense of some skills. Now, the fidelity checks assure he teaches all the key lesson content, and he has developed creative ways to fit supplemental instruction into his day, as we saw above. The Grade 7 teachers met during their planning periods on the days they observed each other and discussed their implementation. This led to improvement in everyone’s implementation. Mr. Amante has felt more confident in his instruction—and that of his colleagues—because of this.

In addition to providing instruction whole group, Mr. Amante does some instruction in small homogenous reading groups. *Reading Adventures* includes resources for these groups, including lessons designed to reteach abstract vocabulary and difficult comprehension skills (e.g., inferencing), to practice comprehension strategies, to support English Language Learners with language and vocabulary, and to cover advanced concepts. Mr. Amante meets with his small groups at least 3 times a week for about 10 minutes per group. These groups give him the opportunity to provide more carefully targeted instruction. The groups are not part of secondary intervention, however, because they are for all students and they are part of his reading program.

Progress Monitoring

Once a week, Mr. Amante administers CBM Maze probes to his 11 at-risk students, including Xavier and Zachary. These weekly administrations are called “probes.” He only administers one passage each time. The data Mr. Amante collects will allow him to see whether his students are progressing enough. After 7 weeks of progress monitoring, Mr. Amante can evaluate the effectiveness of his core instruction.

Remember that we are determining whether students respond based on their *trend*, that is, how much they are improving, not where they started. To determine the trend, we calculate a slope, the weekly increase in the number of words read correctly.

Mr. Amante follows this procedure:

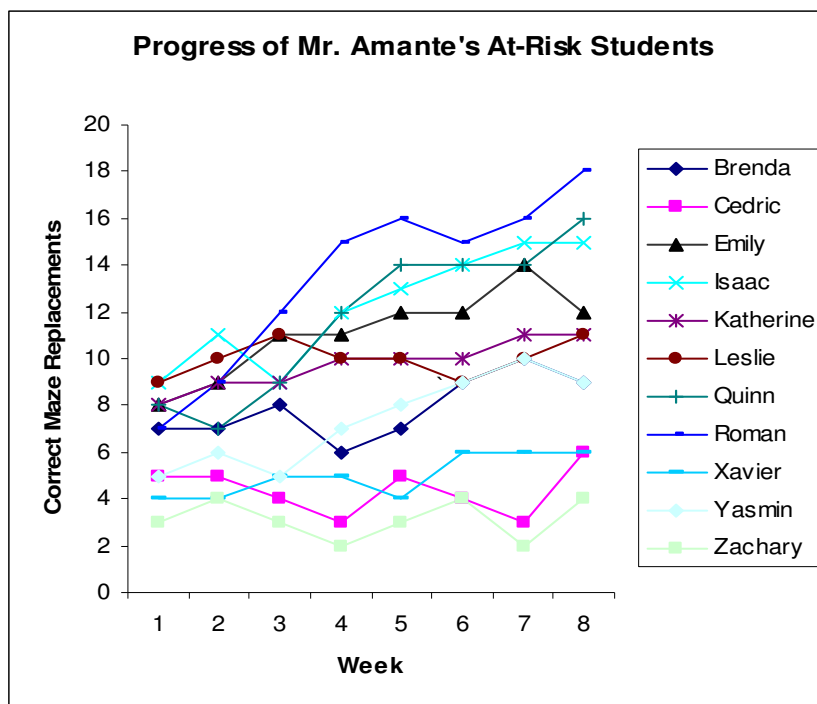
1. He separates the probes into three roughly equal groups. It is important to have three data points in the first and last groups. The groups are shown in the table below.
2. He takes the median from the third group and subtracts the median for the first group.
3. He divides by the number of probes minus 1 to get the slope.

So, in the case of Quinn, the probes separate this way: (12, 11, 13) (16, 18) (18, 18, 20). The median of the third group is 18 and the median of the first group is 12. The number of probes minus 1 is 7 (we count the screening as a probe). So: $(18-12)/7 = 0.86$. This means that each week, Quinn was able to correctly replace a little less than one more item on the Maze than the previous week. The slope of improvement is 0.86.

The following table shows the slopes for the at-risk students.

Student	Screening	PM Week 2	PM Week 3	PM Week 4	PM Week 5	PM Week 6	PM Week 7	PM Week 8	Slope
	1	2	3	4	5	6	7	8	
Brenda	11	11	12	10	11	13	14	13	0.29
Cedric	10	10	9	8	10	9	8	10	
Emily	13	14	16	16	17	17	19	17	0.43
Isaac	14	16	14	17	18	19	20	20	0.86
Katherine	13	14	14	15	15	15	16	16	0.29
Leslie	14	15	16	15	15	14	15	16	0.00
Quinn	12	11	13	16	18	18	18	20	0.86
Roman	11	13	16	19	20	19	20	22	
Xavier	8	8	9	9	8	10	10	10	0.29
Yasmin	9	10	9	11	12	13	14	13	0.57
Zachary	8	9	8	7	8	9	7	9	0.14
	Group 1			Group 2		Group 3			

Now Mr. Amante has enough information to determine which students are responding to intervention. The figure below should give you a rough sense of which students are responding.



The graph is good, but the slopes allow us to compare student progress to benchmarks. For Grade 7, the expectation is that students will correctly replace 0.40 more words each week on the Maze passages. Technically, this means that every time they do the Maze, they should replace four tenths of one more word. But, you can't replace four tenths of an item. So, it means that over 10 weeks, students should replace 4 more words correctly. The expectation of a slope of 0.40 means that students whose slopes fall below 0.40 have not made adequate progress, that is, they are not improving in their Maze replacements.

Tier II Interventions

Now that Mr. Amante knows which students are not responding to Tier I Interventions, secondary interventions (Tier II) can begin. For Grade 7, there are two secondary intervention options, *Fantastic Fluency* and the district-designed comprehension program, Reading For Meaning. Unfortunately, the CBM Maze does not really tell Mr. Amante which program would be best for his students.

Fantastic Fluency is the secondary intervention program WCPS purchased for Grade 7 students who struggle with advanced decoding and fluency. A diagnostic assessment suggested that Cedric and Leslie would benefit from this instruction. It will be delivered by a paraprofessional assistant trained by Ms. Morrison, the Reading Specialist. It is important to note that students will *still receive core instruction* because *Fantastic Fluency* is purely supplemental, including only phonics and fluency instruction. If they were pulled out during core instruction, these students would receive no comprehension or vocabulary instruction, and this could inhibit their ability to keep up with Grade 7 demands (even if *Fantastic Fluency* brought their word reading skills up to grade level).

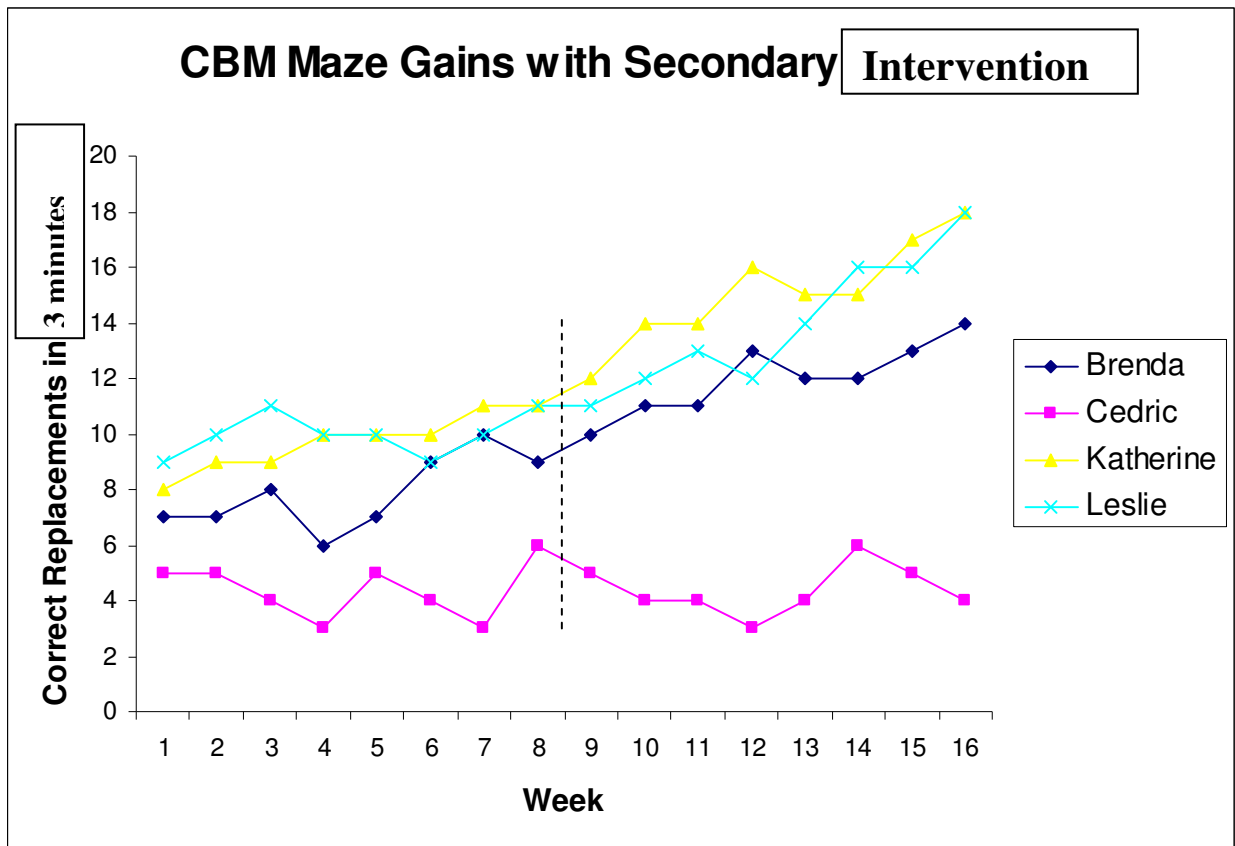
Meanwhile, Ms. Morrison taught the Reading For Meaning program, in which Brenda and Katherine were enrolled. The district decided that because Reading For Meaning was not a standard program, it was important to check fidelity to be sure the research-based elements of the program were being used as designed. As a result, Ms. Morrison agreed to be observed 3 times during the 8 week intervention by staff from the curriculum department. They provided her with feedback on her implementation to help her improve fidelity to the core elements of the program.

Once a week, Ms. Morrison measures the progress of all *Fantastic Fluency* and Reading For Meaning students using the CBM Maze. She has also chosen to administer Grade 7 oral reading fluency (ORF) passages to the *Fantastic Fluency* students, even though these data were not included in her main reports. Because these students are working on fluency, she wanted a direct measure of their fluency improvement. She may see, in fact, that these students improve in fluency on ORF but remain weak on Maze. If this occurs, her students may transition out of her program but then begin Reading For Meaning instruction.

Now, here are the data for Leslie and the other students in Mr. Amante's class who received secondary interventions (Note that because Xavier and Zachary are receiving instruction from other school personnel, their data are not shown here.):

Student	PM Week 9	PM Week 10	PM Week 11	PM Week 12	PM Week 13	PM Week 14	PM Week 15	PM Week 16
Brenda	14	15	15	17	16	16	17	18
Cedric	9	8	8	7	8	10	9	8
Katherine	17	19	19	21	20	20	22	23
Leslie	16	17	18	17	19	21	21	23
	Group 1			Group 2		Group 3		

The following figure shows the differences in slope before and after intervention (marked by the dotted line).



We can tell that Cedric’s progress is still very slow. He will need tertiary intervention in order to make adequate gains. We will discuss that below, but before that, the mid-year screening is important to describe.

Mid-Year Screening

Now that Mr. Amante’s students are more than half-way through Grade 7, it is important to do a second screening.

The screening procedure is identical to the screening procedure at the beginning of the year. Students read two passages and Mr. Amante averages them to get a screening score.

Dr. O’Bannon suggested they make 18 the at-risk cutoff. Whether the cutoff is higher or lower depends on the capacity of the school to serve secondary intervention students. If the school has many resources and can support more students in secondary interventions, the cutoff would be higher. If resources are tight, the cutoff would have to be lower.

Below are Mr. Amante’s students’ scores for the midyear screening (scores for the at-risk students on Screening 1 are highlighted):

Student	Screening 1 List 2	Screening 1 List 2	Screening 1 Average	Screening 2 List 1	Screening 2 List 2	Screening 2 Average	Screening 3 List 1	Screening 3 List 2	Screening 3 Average
Aaron	17	15	16	22	23	23			
Brenda	10	12	11	19	18	19			
Cedric	9	10	10	8	11	10			
Daniela	27	28	28	33	32	33			
Emily	13	13	13	19	18	19			
Francisco	26	24	25	28	28	28			
Gracie	21	20	21	22	25	24			
Hugo	15	16	15	20	21	21			
Isaac	13	14	14	26	25	26			
Jacqueline	27	27	27	33	31	32			
Katherine	11	15	13	21	23	22			
Leslie	14	14	14	22	24	23			
Michael	20	21	21	22	23	23			
Natasha	23	21	22	24	24	24			
Oscar	22	22	22	29	32	31			
Paige	17	15	16	18	18	18			
Quinn	11	13	12	21	21	21			
Roman	10	11	11	24	25	25			
Savannah	23	23	23	25	26	26			
Terrence	21	22	22	24	27	26			
Ulises	15	14	15	17	18	18			
Victoria	15	18	17	25	24	25			
Wendy	24	22	23	31	32	32			
Xavier	8	8	8	7	10	9			
Yasmin	10	8	9	16	17	17			
Zachary	9	7	8	11	13	12			

These data are very interesting because there are some of differences from the beginning of the year.

Let’s examine the at-risk students from Screening 1.

- Of those 11 students, 6 continue to be at-risk:
 - Zachary and Xavier: They received additional instruction from the beginning of the year. These were obviously good decisions because they are still struggling with grade-level skills at the midpoint of the year.
 - Cedric went through 7 weeks of progress monitoring and *Fantastic Fluency* for 8 weeks, but his scores are still very low. He will need to be referred for tertiary prevention.
 - Brenda is a tricky case. She appears to be missing targets by slim margins in many cases (her slopes are just not good enough, and on the mid-year screening her score is only one correct replacement away from the cutoff). So, some would say she is a candidate for tertiary prevention. On the other hand, she may benefit from simply one

- more round of Reading For Meaning instruction in secondary prevention. WCPS has decided that students like Brenda should get a second opportunity to respond to intervention. These students, termed “nearly responsive,” are defined as students who nearly missed slope or screening targets after secondary prevention. These students always get a second chance to respond before tertiary prevention is considered.
- Yasmin and Emily appeared to be making adequate progress based on their slopes during the 7 weeks of progress monitoring. So, secondary intervention is the obvious next step for them. More progress monitoring is not needed to realize that they probably need additional support to meet grade-level standards.
 - The remaining 5 students who were initially at-risk are above the benchmark now:
 - Isaac, Quinn, and Roman were doing fine after the progress monitoring period, and continue to do fine.
 - Katherine and Leslie both benefitted from secondary intervention and are doing better now.
 - Finally, two new at-risk students, Paige and Ulises, have appeared. They are also candidates for secondary intervention. Although we have not engaged in extensive progress monitoring, we have a sense of their slopes based on their initial scores and their present scores. They are not making adequate progress, and additional support can begin immediately.

Secondary Prevention, Round 2

Ms. Morrison and her paraprofessional work with multiple groups of Grade 7 students, providing additional support. As stated above, they do not wait for additional progress monitoring data before they intervene. Students below the cutoff at the mid-year screening all get secondary intervention (except the candidates for tertiary intervention). Ms. Morrison is still administering Oral Reading Fluency (ORF) passages to determine placement for secondary intervention, and some students (in other classes) actually transitioned from *Fantastic Fluency* to Reading For Meaning. In other words, the cause of their difficulty was determined to be primarily comprehension once they improved their word reading ability.

As before, Ms. Morrison tracks the progress of all the secondary intervention students on a weekly basis. Instruction once again lasts six to eight weeks.

Referral for Special Education Evaluation

Cedric did not respond to primary or secondary interventions, so he will receive tertiary interventions and a referral for a special education evaluation. In WCPS, a tertiary intervention begins with a comprehensive evaluation of student needs. This evaluation includes examination of a student’s academic work, some cognitive/psychological processing assessment, and standardized academic assessments.

Information regarding the comprehensive evaluation and assessments used will be provided prior to the next webinar on February 11, 2010.