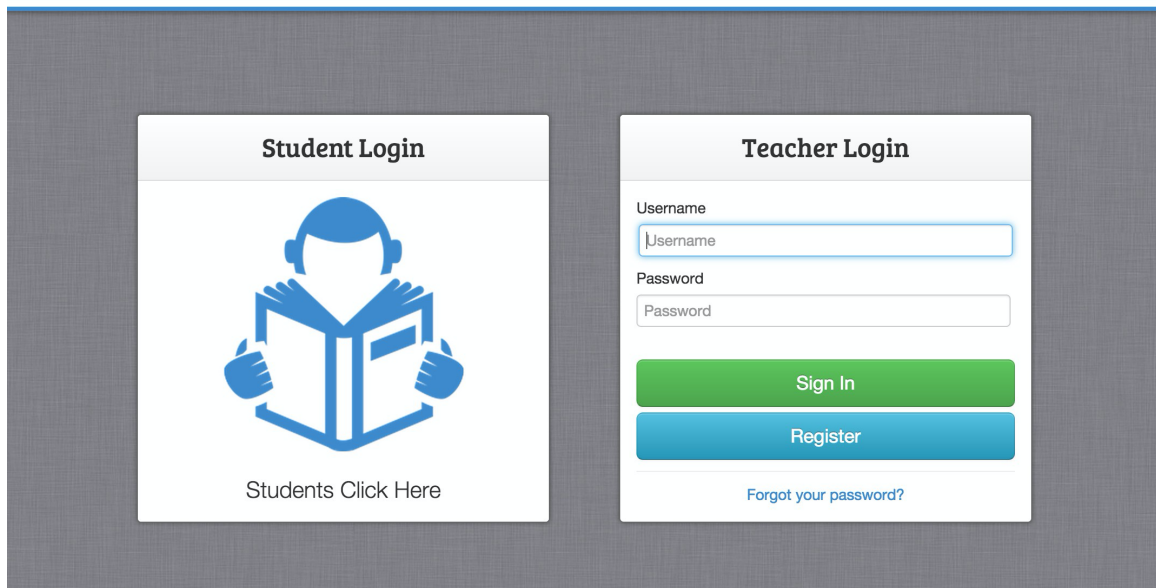# Teachers' Manual for easyCBM Lite Edition:

Getting the Most Out of the System

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Getting Started: Basic Concepts

EasyCBM® was designed by researchers at the University of Oregon as an integral part of an RTI (Response to Intervention) model. From the start, developers have emphasized the goal of the system: to help facilitate good instructional decision-making. This project began with a grant from the federal Office of Special Education Programs in 2006, but it has continued to expand with the help of our school district partners across the state of Oregon and – more recently – across the United States. In the fall of 2009, there were over 20,000 registered users on the site, spread out across the 50 states. By September of 2010, this number had grown to over 68,000, representing over half a million students. In the years since then, the user base has grown steadily. The easyCBM system has been used by well over 4 million students and over 300,000 teachers.

The assessments on the system are what is known as curriculum-based measures (CBMs). CBMs are standardized measures that sample from a year's worth of curriculum to assess the degree to which students have mastered the skills and knowledge deemed critical at each grade level. The CBMs on the easyCBM® system are often referred to as 'next-generation CBMs' because we used an advanced form of statistics, Item Response Theory (IRT) during measurement development to increase the consistency of the alternate forms of each measure type and increase the sensitivity of the measures to monitor growth. At each grade level, alternate forms of each measure type are designed to be of equivalent difficulty, so as teachers monitor student progress over time, changes in score reflect changes in student skill rather than changes in the test forms.

The **reading tests** include measures of Alphabetic Principle (*Phoneme Segmenting*, *Letter Names*), Phonics (*Letter Sounds*), Fluency (*Word Reading Fluency*, *Passage Reading Fluency*), Vocabulary, and Comprehension (*Basic Reading* (Deluxe/District versions only) and *Proficient Reading*). These measures are based on the "Big Five" from the National Reading Panel.

The **math tests** are based on the National Council of Teachers of Mathematics (NCTM) Focal Point Standards in Mathematics and include three test types per grade (aligned with the NCTM Curriculum Focal Points for each grade level). Each of the *Basic Math* tests is comprised of 16 items (though the *Basic Math* screening measure on the Teacher Deluxe and District version has 45 items). In addition, the Deluxe and District versions have more advanced math measures (*Proficient Math*) as well.

We have three different versions of easyCBM®: two designed for individual teacher use and the other for school- or district-wide adoption.

The **Teacher version** includes both a Lite Edition and Teacher Deluxe version. The Lite Edition offers a limited number of progress monitoring measures. The Teacher Deluxe version has both progress monitoring and benchmark screening measures, as well as more assessment types and a greater variety of reports than the free Lite Edition version. Both Teacher versions are designed for small-scale use where individual teachers are working in schools or districts that are not interested in more system-wide approaches to screening and progress monitoring. Where more than one teacher (or at least 200 students) are using the system, the District version is more appropriate.

The **District version** has both screening and progress monitoring measures. The screening

measures are designed for use three times per year (fall, winter, spring) and are limited to on-grade-level testing. The progress monitoring measures are designed for more frequent use – every month (Math, Reading Comprehension, and Vocabulary), every two weeks (Word and Passage Reading Fluency), or every week (Phoneme Segmenting, Letter Names, and Letter Sounds). For progress monitoring, teachers are encouraged to select the single measure type and difficulty (grade level) that will be most sensitive to showing growth for a particular student.

District or Teacher easyCBM: Which is Right for Your Needs?

Features	Teacher Version	District Version
Developed for use in an RTI framework	√	√
Progress monitoring measures, K-8, in reading and mathematics	√	√
Teacher-level access to a single class	√	√
Includes online training videos on test administration and scoring	√	√
Individual student progress graphs	√	√
Intervention lines drawn on graphs automatically when intervention information is added by teacher	√	√
Group graphs with information about whole-class performance	√	√
Individual teacher types in student names	√	
Centralized upload of student and staff information		√
Intended for individual teacher use, where no other staff member needs access to the data	√	
Intended for systems-level use, where other staff members need access to the data for data-team, SST, IEP, etc. meetings		√
Building-level access to all classes in the school		√
District-level access to all classes in the district		√
Grade-level graphs with information about whole-grade performance		√
Sortable student rosters, organized by grade and class, color-coded to indicate 'risk level' after each benchmark assessment		√
Assessment results can be downloaded from the easyCBM system for upload to district data system		√
Designated benchmark/screener measures, K-8, in reading and mathematics		√

Specific Information about the Math Tests

The math tests on easyCBM® were developed to assess students' mastery of the knowledge and skills outlined in state and national content standards (the National Council of Teachers of Mathematics Focal Point Standards, the CCSS Standards, and content standards adopted by different state departments of education). Theywere designed to focus more on students' conceptual understanding than basic computational skills.

These math items were written by teachers with both general education and special education experience and have been piloted across the country with students from a variety of backgrounds. They have undergone review by researchers at the University of Oregon and have been checked carefully for typographical errors.

Like all measures on easyCBM®, alternate forms of each math test in a given grade level were designed to be of equivalent difficulty, so teachers can progress monitor students from the initial screening assessments, through their progress monitoring tests every month throughout the year, comparing progress to subsequent screening assessments (winter and spring).

During the screening test window, students take sub-tests covering all three focal point standards from their grade level. In between the benchmark testing windows, teachers can select a single focal point standard to use for monitoring progress or can draw from across the different focal points at that grade level. The math tests from a given focal point should be used no more than once every 3 weeks for monitoring progress. If teachers want to monitor progress weekly, they need to cycle through the different focal points, so each one gets tested every 3 weeks.

Items on the *Basic Math* progress monitoring tests increase in difficulty from Item 1 through Item 16, with one exception. On every test, Item #5 is actually the most difficult item (based on our pilot studies of the items). Item #16 is actually the fifth-easiest item. We made the Item 5/Item 16 substitution on each form to provide teachers with additional information. If students get Item 6,7, and 8 correct but misses Item 16, it is likely that they simply stopped trying by the end of the test, because the last item should be easier than the items that come before it.

All easyCBM math items that have words in the question itself or the answer options come with a 'read aloud' option. Students can click on a speaker icon and have the math item read aloud to them. For this reason, it is important that students have headphones available in the computer lab when testing.

Administering and Scoring the One-On-One Measures

Standardized Administration Procedures

For all individual measures, it is important to assess in a quiet place free of distractions and noise. You will need a clipboard, stopwatch, pencil, place marker or cover sheet, assessor copy and student copy of the test being administered.

Letter Names (LN) and Letter Sounds (LS) – Kindergarten and First Grade
1. Place the probe marked "Letter Names Student Copy" or "Letter Sounds Student Copy" in front of the student and hand the blue marker to the student to help them keep their place.
2. Read the directions to the student exactly as written on the assessor copy.
3. As the student reads letters from the Student Copy of the test, follow along on your own Assessor Copy. Put a slash through any letter name/sound the student says incorrectly.
4. Remember that these are **60 second timed tests**.
5. Start the stopwatch when the student says the first letter.
6. Place a bracket after the last letter name or sound read.

LN / LS Scoring Directions

1. If the student does not get any correct letter names/sounds within the first 3 rows, discontinue the test and record a score of zero.
2. If the student hesitates for 3 seconds on a letter, the letter is scored incorrect and the name / sound of the letter is provided to the student.
3. If the student makes an error then self corrects within 3 seconds, the assessor writes "SC" above the letter and it is not counted as an error.
4. If a letter or an entire row is skipped, then that letter or row is counted as incorrect.
5. Count and record the number of correct letter names/sounds in 60 seconds.

Examples:

r	B	s	K	j	N	p	Z	h	o	10

M	q	p	O	W	e	R	T	Y	U	50

Phoneme Segmentation (PS) – Kindergarten and First Grade

1. There is no student copy of this test, as the student is listening and responding to the words supplied by the assessor.
2. Read the directions to the student exactly as written on the assessor copy.
3. Underline each phoneme the student says correctly. (See Example Item 16.)
4. Put a slash through each phoneme the student misses. (See Example Item 17.)
5. The student is not penalized for adding extra phonemes if they are separated from the other sounds in the word. (See Example Item 19.) If the extra phoneme is added to an existing one, the segment is marked incorrect. (See Example Item 20.)
6. If the student repeats the entire word, the word is circled and no credit is given. (See Example Item 21.)
7. Schwa sounds. Schwa sounds (/u/) added to consonants are not counted as errors. Some phonemes cannot be pronounced correctly in isolation without a vowel, and some early learning of sounds includes the schwa. For example, if the word is "trick," and the student says "tu...ru...i...ku" they would receive 4 of 4 points.

   WORD: STUDENT SAYS: SCORING PROCEDURE: CORRECT SEGMENTS:
   a. trick   "tu...ru...i...ku"   /t/ /r/ /i/ /k/   4 /4
   b. cat   "ku...a...tu"   /k/ /a/ /t/   3 /3
9. **This is a 60 second timed test**. Do all items on the page. If the student has a score of zero after the first five rows (the student simply repeats the word after it is provided, for example) stop the test and give the student a score of zero.

Examples:

Item	Teacher Says	Student Says	Number Correct
16	straight	/s/ /t/ /r/ /aigh/ /t/	_5_ / 5
17	first	/f/ /ir/ /s/ /t/	_3_ / 4
18	lamb	/l/ /a/ /mb/	_2_ / 3
19	bide	/b/ /i/ /de/ s	_3_ / 3
20	soak	/s/ /oa/ /ks/	_2_ / 3
21	mess	/m/ /e/	_0_ / 3

Word Reading Fluency (WRF) – Kindergarten through Third Grade
1. Place the student copy marked "Word and Sentence Reading" in front of the student. Begin with **Word Reading** then move on to **Sentence Reading.**
2. Read the directions to the student exactly as written on the assessor copy.
3. Put a slash through any word the student misses. You may want to use a cover sheet to reveal only the words in the row or sentence the student is reading. If the student is unable to read any words in the first three rows, discontinue the test. Note this on the test. **This is a 60 second timed test.**
4. Start the stopwatch when the student says the first word as you begin each test.
5. Place a bracket after the last word read.

Word Reading Scoring Directions

1. If the student does not get any words correct within the first three rows, discontinue the test and record a score of zero.
2. If the student hesitates for three seconds on a word, the word is scored incorrect and the word is provided to the student.
3. If the student makes an error then self corrects within 3 seconds, the assessor writes "SC" above the word and it is not counted as an error.
4. If a word or an entire row is skipped, the assessor should help the student find his/her place. This would not be counted as an error if the student reads the word correctly.

Errors are marked by putting a slash through any missed words.

Examples: **sc**

| the	or	will	number
of	about	remain	no

**Passage Reading Fluency (PRF) – First Grade through Eighth Grade**

1. Read the directions to the student exactly as written on the assessor copy.
2. Go over all proper nouns in the passage before beginning the timing.
3. This is a **one minute timed test**.
4. Begin timing when the student says the first word of the reading passage.
5. Place a bracket after the last word read.
6. If the student does not read any words correctly in the first line of the first passage, discontinue the task and record a score of zero.
7. If a student does not supply a word within 3 seconds, the word is provided and the error is marked with a slash through the word.
8. Omitted words are scored as incorrect and marked with a slash through the word.
9. If a student hesitates or struggles with a word for 3 seconds, tell the student the word and mark the word as incorrect.
10. If the student makes an error then self corrects within 3 seconds the assessor writes "SC" above the word and it is not counted as an error.
11. Inserted words are ignored and not counted as errors.
12. At the end of the test, the assessor should fill in the spaces indicating Total Words Read, Errors, and Total Correct Words.

Administering the Online Measures

The Math, Vocabulary, and Reading Comprehension measures are intended to be administered to students oncomputer.
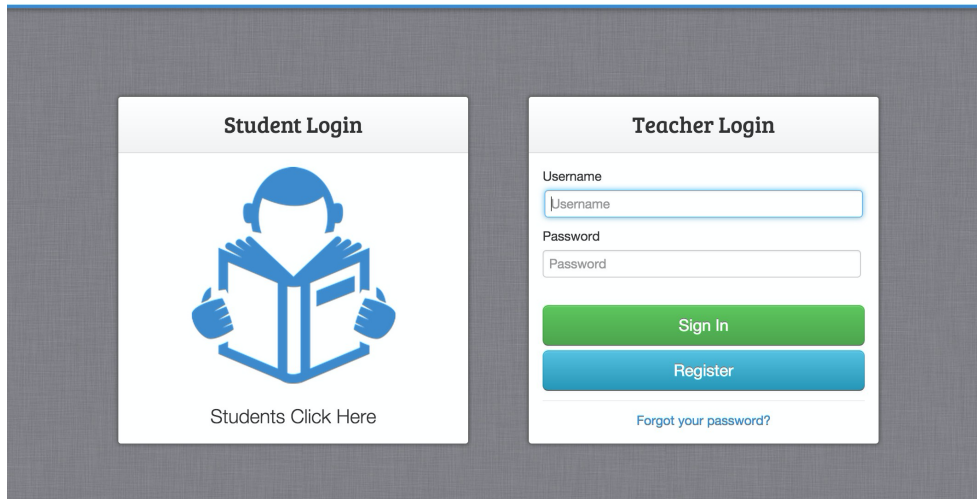
Students type in their teacher's username, select their name from a drop-down list, and choose the test they will be taking that day.
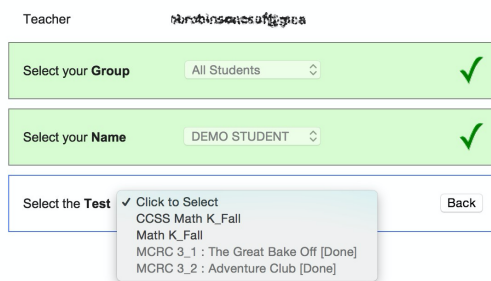
The computer loads the test automatically and scores the answers as the student provides them. As soon as students have finished the test their scores appear on the teacher report pages.

Considerations for Online Test Administration

Before students begin their tests, teachers need to check that they have selected their correct name from the drop-down list. If they choose someone else's name, students can be directed to go 'back' and select their own name.

During the test, teachers are directed to walk around the room to monitor for cheating and to help ensure a quiet and appropriate testing environment.

Teachers are to note if a student's IEP allows them to have accommodations during testing, those accommodations are to be provided when they are taking the easyCBM® assessments.

During the math tests, we recommend students should not use a calculator (unless their IEP stipulates this as an accommodation) but they should have scratch paper available during the test. If a district policy encourages calculator use, of course, then teachers may be asked not to follow this recommendation.
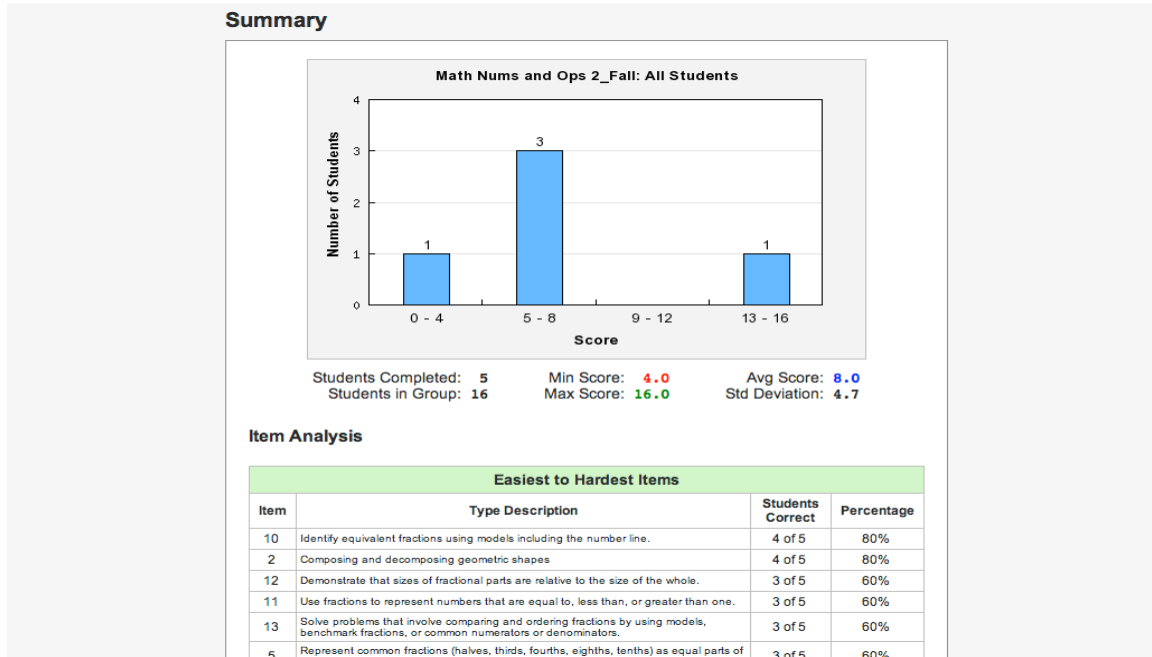
If students run out of time, the computer remembers where they left off and returns them to the same item when they log back on to the site.

Accessing the Reports

The easyCBM system gives teachers several different reports. The first is the Group Report. When teachers select this report, they have access to detailed information about a specific test their students have taken. To get to the report page, teachers click on the name of a test that their students have taken and then scroll down the page to get to the report that opens the list of tests taken.

The first piece of information teachers see gives them a visual of how heterogeneous the classroom is at the time of the assessment. If students 'clump together' in similar skill groupings, it is likely they can effectively meet their instructional needs with whole-class instruction. When teachers have one or a few students who score significantly lower (or higher) than their peers, they may need to investigate opportunities to differentiate instruction to better meet their specific skill-based needs.

Underneath the bar chart, teachers see an Item Analysis list. For all the tests with individual item scores (math, comprehension, etc.), this list provides them with additional information specific to the class. It informs teachers of the specific assessment objective for each item on the test and lists the items in order, from the items students found easiest to those students found most challenging.

Summary

Math Nums and Ops 2_Fall: All Students

| | Students Completed: 5 | Min Score: 4.0 | Avg Score: 8.0 |
| | Students in Group: 16 | Max Score: 16.0 | Std Deviation: 4.7 |

Item Analysis

	Easiest to Hardest Items			
Item	Type Description	Students Correct	Percentage
10	Identify equivalent fractions using models including the number line.	4 of 5	80%
2	Composing and decomposing geometric shapes	4 of 5	80%
12	Demonstrate that sizes of fractional parts are relative to the size of the whole.	3 of 5	60%
11	Use fractions to represent numbers that are equal to, less than, or greater than one.	3 of 5	60%
13	Solve problems that involve comparing and ordering fractions by using models, benchmark fractions, or common numerators or denominators.	3 of 5	60%
5	Represent common fractions (halves, thirds, fourths, eighths, tenths) as equal parts of a whole, parts of a set, or points or distances on a number line	3 of 5	60%

Teachers can use this information to help guide their decision-making in terms of what areas to focus on instructionally.

For students whose progress teachers are most concerned about, teachers can access individual student progress graphs. These graphs track students' scores over time and include progress monitoring data for each test teachers have administered. The Intervention Line is easy to add – simply click on the **Intervention** link and type in the specific intervention teachers are providing to that student. This information is helpful for parent conferences, SST meetings, and IEP reviews.
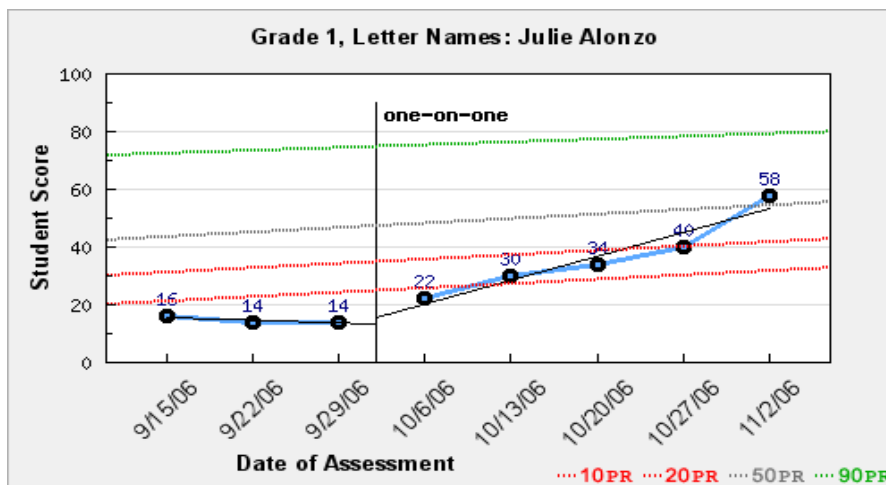
Grade 1, Letter Names: Julie Alonzo

How Do I Know Which Progress Monitoring Measure to Use?

The easyCBM® assessments are built on a scale of progressive difficulty, with each grade level becoming more challenging, and each measure type within a grade level also 'stair-stepping' up in difficulty. For example, with a 6th grade student, teachers have the following tests to select from: Proficient Reading (which provides information about that student's skill in literal, inferential, and evaluative comprehension) and Passage Reading Fluency (which

provides information about the student's ability to read narrative text aloud with accuracy).

Teachers begin by administering the on-grade-level measures of Passage Reading Fluency and Proficient Reading to that student. Once the scores are in the system, they should look at the student's graph – if the score falls above the 50th percentile line, then they can say that 'this particular skill area is not the issue.' If his/her score falls between the 10th and 50th percentile, then they say 'this particular skill is an area of weakness' AND select that measure to use for progress monitoring.

If his/her score falls below the 10th percentile, then teachers know: (a) there may be reason to suspect an even earlier skill deficit (in this case, maybe the student has never mastered phonics, so the Letter Sounds measure would be the most appropriate to use for monitoring progress **while at the same time ensuring that the student is being instructed in phonics:** (b) if the subsequent test of letter sounds (available on the K and Grade 1 tabs on easyCBM®) indicates that the student is at or above the 50th percentile in that skill area, then theissue is probably not one of basic phonics, but is, instead, indicative of a need for additional fluency-building work, but at an earlier grade level (to firmly establish sight words). If the student scored well below the 10th percentile on the 6th grade fluency measure, teachers would probably want to drop 2 grades (to 4th grade) – hopefully, teachers would then get a score that would fall between the 10th and 50th percentile lines – this is the range at which the measures on easyCBM® are most sensitive to growth/most appropriate to use. If the student's score is right ator just below the 10th percentile on the 6th grade measure, teachers can bump them down to the 5th grade instead.

The goal is twofold: to determine what underlying skill deficit might be leading to the student's 'not proficient' score on the state test and to identify the appropriate measure to use to monitor the student's improving skill as he/she receives targeted intervention/instruction aimed at addressing those skill deficits.

In all cases, teachers need to get the student up to the most challenging grade-level tests they can, as quickly as they can, but each student's trajectory is likely to be slightly different (it will depend on their level of initial skill/underlying skill deficits; the intensity of intervention provided to him/her; his/her ability to benefit from that particular intervention (as well as motivation to improve); attendance (a student must be present to benefit from instruction), etc.

For a 6th grader who needs to go all the way back to intensive instruction in phonics (Letter Sounds), it is unlikely teachers will be able to make up all the ground they need in order to get his/her to on-grade-level comprehension by the end of the year, but teachers can certainly make good progress toward that goal, with the intention of continuing to make progress in grade 7, etc.

Letter Sounds/basic phonics is a skill area that teachers should be able to see dramatic improvement in with intensive intervention in a matter of weeks for older students (again, though, this assumes intensive and appropriate instructional intervention to ensure the student gains the skills he/she missed). Ideally, teachers should see an older student (grade 2 and above) move from 10th percentile to 50th on the Letter Sounds measure in a month's time or less.

Building fluency takes longer, but average growth is about 4-6 words per week. However, for students who are far behind their peers AND who are receiving instructional interventions specifically targeting fluency building (repeated readings, choral readings, reading aloud to younger kids/parents/mentors, etc.), teachers should see the rate of growth exceed 6 per week (otherwise, the student is not 'catching up,' merely maintaining the existing gap).

Ideally, teachers select an out-of-grade-level fluency measure but bump the student up to the next grade level as soon as he/she hits the '50th percentile mark' – if teachers start a 6th grader on the grade 2 PRFs, then after 4 or 6 weeks of intensive fluency building work (designed to reinforce phonics for unfamiliar words and to move additional words into her sight vocabulary through repeated exposure) they should be ready to move to the grade 3 PRFs, a month or 6 weeks later, on to grade 4, and so on.

Once students are reading fluently at grade level (50th percentile mark on grade-level PRF measures), they probably have sufficient fluency skill to be able to start focusing more on comprehension. Until they are at that threshold, it's likely that too much 'brain power' is being used to decode unfamiliar words and hold them in working memory to be able to attend to the 'bigger picture' of actual comprehension, except at the most literal level. Once students are able to read more fluently, they are able to focus on making meaning from the words in the text and instruction can move to inferential and evaluative, as well as literal, comprehension.

What if I Don't See Student Growth?

A lack of growth could have several causes. Each of the different forms of each measure is designed to be of equivalent difficulty, so teachers would expect to see growth from one test administration to the next if students are, indeed, making growth. That said, each measure has an optimal range of ability it is designed to measure. If teachers are administering these measures to enough students, they should be able to see a pretty nice 'normal curve' looking distribution on the most recent measure. If the scores are 'clumped' either toward the left (the tests are too hard for the students) or toward the right (the tests are too easy for the students – there's no 'room' for them to show growth), then teachers should probably consider using a different measure.

For instance, for teachers looking at 3rd grade students, if the Word Reading Fluency tests are too easy, move to the Passage Reading Fluency measures. If the Passage Reading Fluency measures are too easy, teachers can move to the Comprehension measures. It's likely that the Comprehension measures are going to be pretty challenging – they're designed to be the most challenging of all the measures at each grade level. So, if teachers are specifically not seeing any growth on those measures, it's important to keep in mind that a jump of 1 or 2 points would actually be pretty significant on that particular test.

It is important to remember that there is a certain amount of unreliability around every score (whether it be Correct Words Per Minute on a Word Reading or Passage Reading test or # of correct answers on a reading comprehension test). Sometimes, students have bad days/good days... sometimes students may be more interested in the passage being read, etc.

But, if teachers don't see growth over a longer period of time, this is definitely something to be a bit concerned about and may require some close examination of what instruction/curriculum the

students are focusing on. It may be that the students have not actually made any more progress in the skill area a particular test is designed to measure... they wouldn't really be expected to unless their classroom experiences were focusing on those skills. In the case of the Word and Passage Reading Fluency measures, classroom instruction/curriculum that emphasizes increasing students' oral reading fluency skills should result in increased scores on these measures. If, however, instruction has focused on building understanding of literary devices or elements of literature, a growth in fluency would not be expected.

One of the most powerful features of this easyCBM® system is its ability to give teachers an opportunity to track progress – or lack thereof – quickly and make adjustments to the curriculum/instruction accordingly rather than waiting for the state assessment yearly score (which arrives too late to be very helpful). If teachers don't see much progress across three or more times of measurement, they are directed to use that information to help guide discussion about instruction.

Why are the Proficient Reading Measures so Long?

The Proficient Reading measures on easyCBM represent the most challenging of the reading measures available on our system. They are intended to be used with students who are already reading at or above grade-level fluency standards. Students who are not yet fluent readers would be more appropriately assessed using the PRF measures.

In designing the measures, we tried to balance the desire for challenging material with the need to ensure that students could finish the tests within a single class period. Because we wanted to go beyond literal comprehension (which is simple to assess with very short passages), we needed to make the stories long and complex enough to allow for the deeper thinking involved in inferential and evaluative comprehension.

Shorter passages, although appealing to many teachers, would not allow for the depth of questions we needed to include so the measures would be useful for students working on higher order comprehension skills. Because of their length, however, we recommend that people limit the frequency with which they administer the comprehension measures to once every 3 to 4 weeks.

We do also offer shorter *Basic Reading* comprehension measures on the Teacher Deluxe and District versions of easyCBM.

How Often Should We Assess?

How often teachers assess students depends on two key questions: How quickly is it reasonable for teachers to expect to see growth in a particular skill area and how much actual intervention has the student received?

Measures such as Letter Names, Phoneme Segmenting, and Letter Sounds can be given more frequently – perhaps as often as every week or two – because students are able to make rapid progress in these skill areas when they are receiving in-depth interventions to help accelerate their learning.

Other measures, such as Word and Passage Reading Fluency, are assessing skill areas that take longer for students to improve. We recommend testing no more often than every other week with these measure types. Note: the teacher version (easyCBM Lite Edition) has a limited number of progress monitoring probes available (no more than 9 of any measure type at any grade level). In school districts where more frequent progress monitoring is taking place are encouraged to sign up for a District account, as

For Comprehension and the Math measures, we recommend testing no more frequently than every 3 to 4 weeks.

In all cases, of course, it is important that the student is actually receiving focused instruction to address their skill deficits if teachers hope to see an improvement in their performance over time.