

FASTfact: CBMreading Score Equating



An important feature of FAST's™ screening and progress monitoring tools is that they have been designed to document student performance as accurately as possible. For students who participate in progress monitoring, there are two ways that their scores might be adjusted in order to ensure accuracy of the progress measures:

- Instructional effects
- Passage difficulty

When a screening score is converted to a different starting score for progress monitoring, the resulting new score is called an *Equated score*.

Instructional effects. The FAST™ system is designed so that screening data are used to set up progress monitoring goals for students. Sometimes, a progress monitoring schedule might be set up several weeks after screening occurs. In order to take into account the ongoing reading progress a student makes during those weeks, the FAST™ progress monitoring set up process will automatically calculate a revised starting score for any students whose screening was conducted more than three weeks before progress monitoring begins.

Here is an example of a revised progress monitoring start score for a student whose screening score was 96 but equated start score is 102.

| Student | Screening | Starting Week | Start | Level | Weekly Gain | Date | Goal | Benchmark | Prior Data?* | Interventions | Student |
|-----------------|-----------|---------------|-------|-------|-----------------|------------|------|-----------|--------------|---|-----------------|
| Jackson, Rachel | 96 | 09/18/2016 | 102 | G4 | 1.5 - Realistic | 05/30/2017 | 156 | 150 | Yes |   | Jackson, Rachel |

Passage difficulty. The second way that FAST™ screening scores are adjusted to set different progress monitoring starting scores and goals is through an adjustment for passage difficulty. The difficulty level of the FAST™ screening passages is slightly higher than the progress monitoring passages. To account for this difference, FAST™ uses **Equated scores** in the progress monitoring schedule. In order to make sure that a student's progress monitoring goal is appropriate, the FAST™ system automatically adjusts progress monitoring goals to reflect the easier level of the progress measures. The method used to make these adjustments is called *linear equating* and the adjustment is very small and usually ranges from 1-10 points.

| Student | Screening | Starting Week | Start | Level | Weekly Gain | Date | Goal | Benchmark |
|---------|-----------|---------------|-------|-------|-----------------------|------------|------|-----------|
| | 18 | 12/11/2016 | 19 | G1 | 2.17 - Very Ambitious | 05/30/2017 | 71 | 71 |
| | 12 | 12/11/2016 | 12 | G1 | 2.46 - Very Ambitious | 05/30/2017 | 71 | 71 |

In this example you will see that one of the student's start scores is different from screening but both goal scores are the same. The Equated score adjustment will happen after saving this progress monitoring schedule.

The most recent screening score is used to establish the initial level of performance. That initial level is used to estimate the start and end points of the goal line. Slight adjustments are made by the FAST™ system after the progress monitoring set-up is submitted. This ensures that goals are set on the same

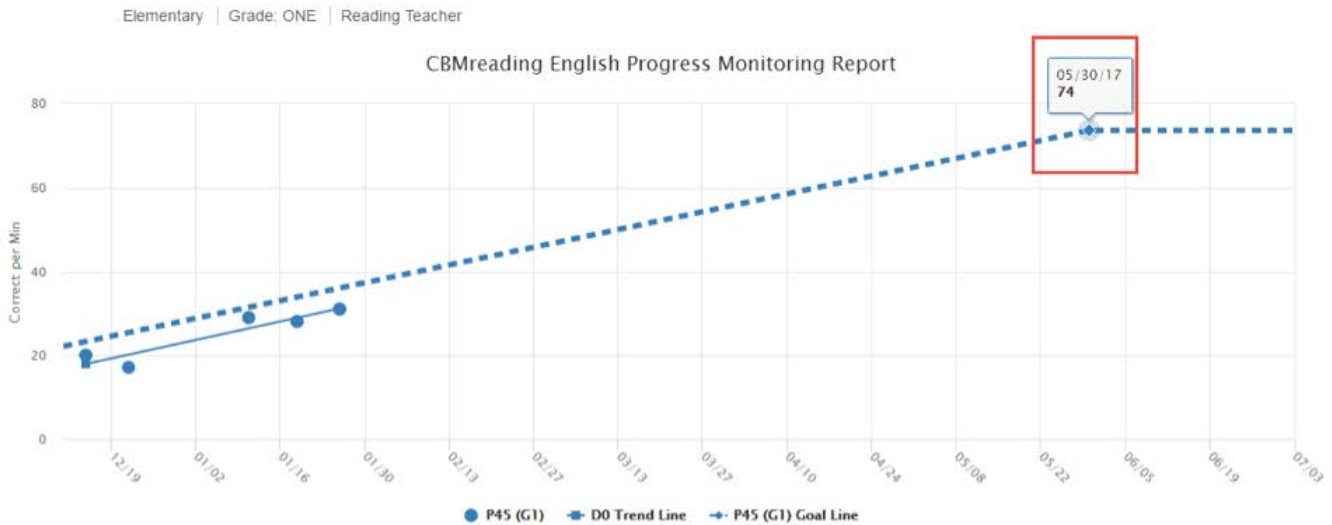
scale as the grade-level screening passages. As a result, students who are on track to meet their progress monitoring goal are also on-track to meet their screening goal. This score equating happens for both grade-level and off-level monitoring.

Here is the progress monitoring screen for the same two students. Notice that the start scores were **Equated** by FAST™ and are now higher for both students.

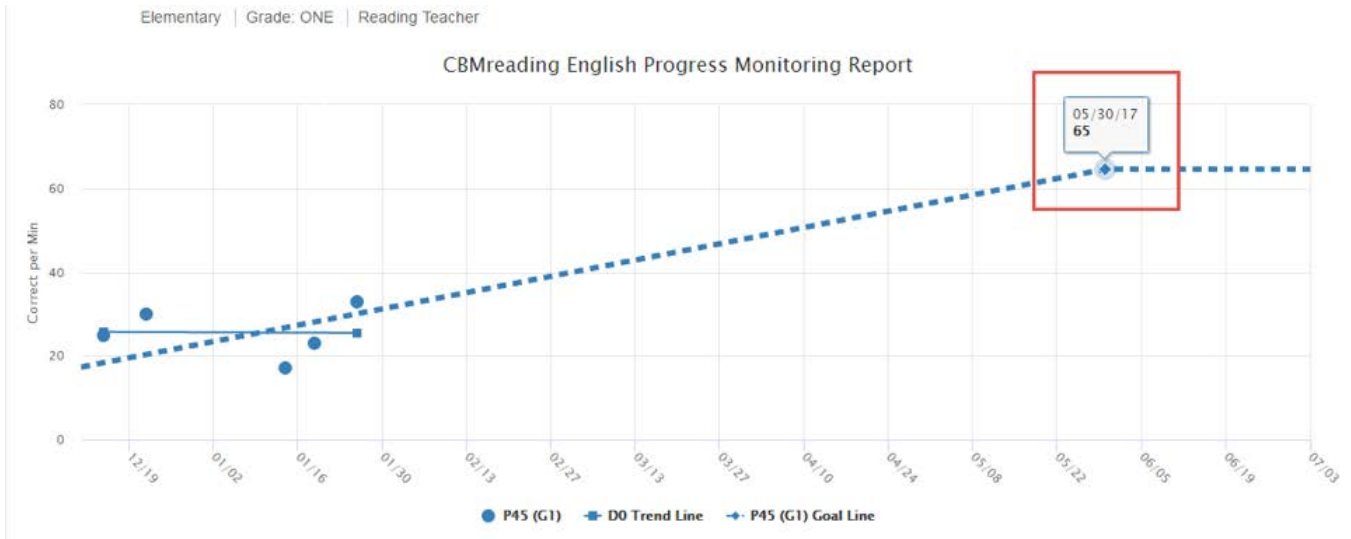
| | Student Name | Level | Start (Equated) | << 18-Dec-16 | 25-Dec-16 |
|--------------------------|--------------|-------|-----------------|--------------|------------|
| | | | | Occasion 1 | Occasion 1 |
| <input type="checkbox"/> | | G1 | 22 | 17 ▼-9.48 | |
| <input type="checkbox"/> | | G1 | 17 | 30 ▲8.74 | |

In addition, the goal scores were adjusted but the new goals do not display on the progress monitoring screen. Instead they can be seen on each student's progress graph.

Here is the first student's progress graph showing the revised start and end of year goals. Notice that the end of year goal was changed from 71 to 74 for this student.



Here is the second student's progress graph. In this case, the student's goal score was changed from 71 to 65. This student's goal score went down because of the lower starting score compared to the other student.



FAST's™ **Equated scores** provide a more accurate measure of the student's performance on CBMreading progress monitoring and help teachers to determine whether interventions are truly working.