



## Handout #2: Creating Baselines and Goal Lines

1. Select the median baseline point. The median is the measure of central tendency that divides the distribution of data in half. Half of the distribution is above the median, and half is below. For example, the baseline scores for a student may be 28, 45, and 35. The median is 35; half the distribution is above the median (45), and half is below (28).
2. Select the expected rate of growth per week. This can be done in several ways.
  - First, the peer-norm method can be used:
    - To apply this method, three average-achieving students are identified in the same academic domain (e.g., reading) as the target student.
    - Administer the same three probes that were administered to the target student, score the probes, find the median score for each student, and then find the median score of the three different student scores.
    - Plot the median peer score on the graph with a wavy line above the student baseline scores. This peer median score can be used as a Long Range Goal (LRG) for the target student. This may appear to be too ambitious a target for the student, in which case it may be preferable to use the second option.
    - To draw in the aimline, place an X on the vertical baseline at the point of the median baseline score.
    - Next, determine a date for the LRG. This could be the date of the annual IEP meeting or the end of the school year. Place a second X on the level of the peer performance at the date that was selected.
    - Connect the baseline X to the goal date X with a line. This line is the aimline and represents the student's estimated or expected rate of growth per week.
3. Second, estimates of student progress based on average performance of students in special education can be used. For example, one large urban school district has determined that special education students grow at a rate of about 1–2 words per week in reading. This can then guide the teacher's decisions.
4. Determine the number of weeks to the goal date. This can coincide with the annual review or the end of the year.
5. Set the long range goal (LRG).
  - Multiply the number of weeks by the expected rate of growth per week.
  - Add this total to the median baseline point.



6. For example: To calculate the LRG, find the median of the baseline data (28, 45, and 35) based on a predicted rate of growth of 2 words per minute per week (wpm/pw) for 10 weeks. Repeat for predicted rate of growth of 1.5 wpm/pw.

2.0 wpm/pw

1.5 wpm/pw

Median 35

Median 35

$2.0 \times 10 = 20 + 35 = 55$

$1.5 \times 10 = 15 + 35 = 50$

LRG = 55

LRG = 50

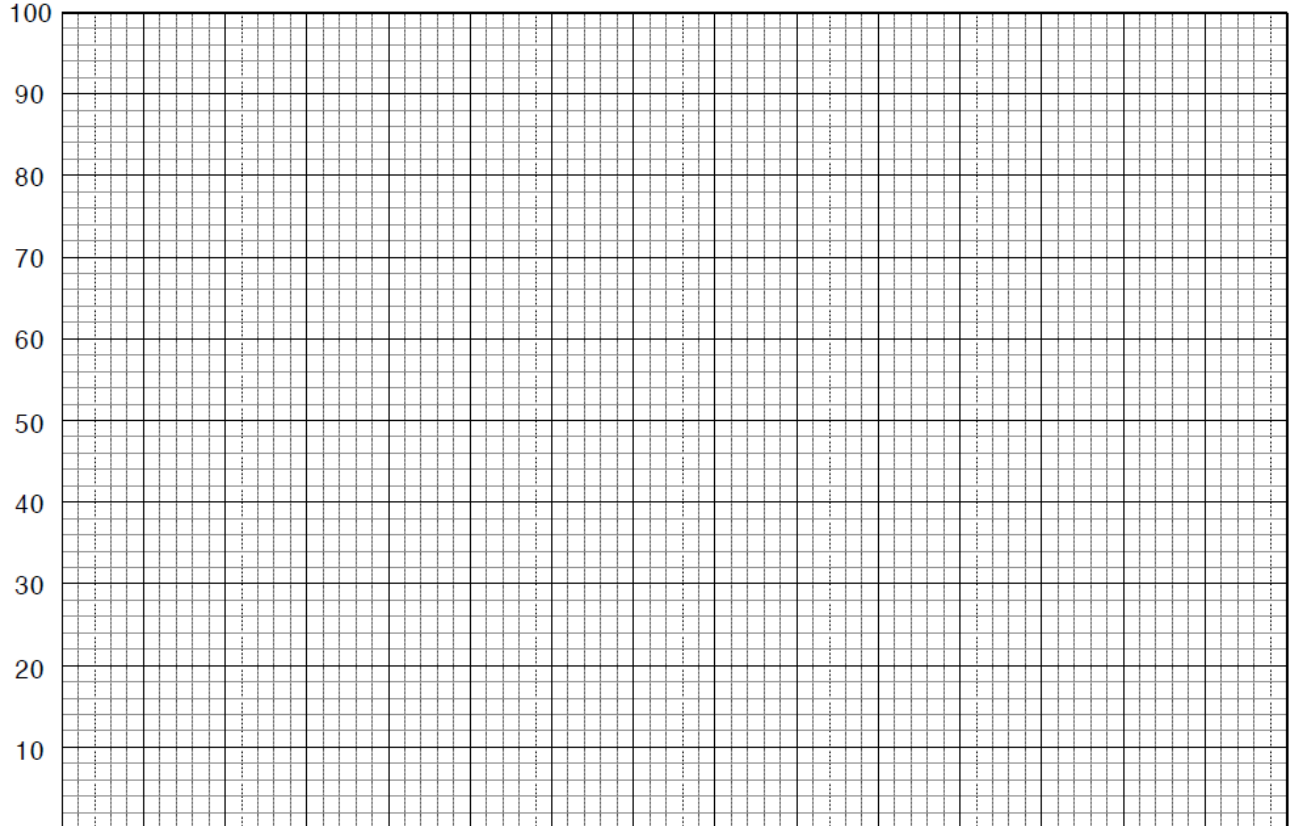
### **What do you do after collecting and graphing baseline data and drawing an aimline?**

At this point, a new teaching strategy or intervention should begin. Ideally, student progress data should continue to be collected, scored, and graphed three times per week. When 9–12 data points have been plotted, a trend (slope) can be calculated and data utilization rules can be used to guide teacher's decision.



Math CEM Part 1

Student's Name \_\_\_\_\_ Teacher's Name \_\_\_\_\_ Baseline \_\_\_\_\_  
 Grade \_\_\_\_\_ Age \_\_\_\_\_ School \_\_\_\_\_ Long Range Goal / Weeks \_\_\_\_\_ / \_\_\_\_\_ STO \_\_\_\_\_



Date													
Monday													
Tuesday													
Wednesday													
Thursday													
Friday													

Adapted from:

[http://www.specialconnections.ku.edu/?q=assessment/curriculum\\_based\\_assessment\\_measurement/teacher\\_to\\_ols/using\\_curriculum\\_based\\_measurement](http://www.specialconnections.ku.edu/?q=assessment/curriculum_based_assessment_measurement/teacher_to_ols/using_curriculum_based_measurement)