

Data in the Classroom

A Critical RTI Element

- System Level
 - NWEA; NECAP; PSAT;
- Classroom Level
 - DRA; AimsWeb; Dibels
- Individual Level
 - Progress Monitoring (CBM)
 - Direct Measurement (Precision Charting)
- Multiple Measures

Measurement for What Purpose?

- System Level
 - Curriculum Decisions
- Classroom or Grade Level
 - Differentiated Instruction
 - Risk Management (Tiers)
 - Cut or Aim points per task
- Individual Level
 - Direct Instructional Decisions

Interventions, or...

What are we Measuring?

- Research Based Instructional Materials
 - Not a publisher or author sponsored study
 - Comparable learning environments
 - Contrast two or more similar programs
 - Results in Peer Reviewed Journal
- Reading and Math National Panel Reports
- FCRR and Oregon web sites

If you are not Progress Monitoring You are not doing RTI

- Direct Measurement of student performance
- Reading, Writing, Math, etc
- Variety of ways of measuring
 - Any form of data is better than no data
 - Rubrics (academic and behavioral)
 - Percentage of correct performance
 - Count Something
 - $\text{Count/Time} = \text{Frequency}$

How Often Do You Monitor?

- Literature is all over the place
 - 3 x year for Tier 1
 - 1 x week to monthly for Tier II
 - 1 x week to daily for Tier III
- How many data points for decisions
 - 7-10 minimum (initial or major decisions)
 - Repeated trials over 2- 6 months
 - (all of above assumes fidelity of implementation for an intervention)
 - (Current state regs in Chap 101 are NOT supported by existing RTI research literature)

How do I Display the Data?

- Learning Rate and Level of Learning
- Tab format (excel work sheet)
 - Hard to look at more than a few days
- Excel or similar equal interval graph
 - No standard way of displaying data which means you can adjust axis and make even bad data look good
- Semi-log chart (Celeration.org)
 - No need to create a statistical adjustment; What you see is what you have (straight line for learning rate)

How does the teacher decide what will be measured?

- Teach what you value
- Instruct with fidelity
- Each data point clear and measurable
- 3+ data points per child per area per day
- Component and Composite skills

How will the teacher collect the data?

- Small groups or individual
- Timed (all learning takes place in the context of time)
- Chart student performance immediately
- Items Correct & Learning Opportunities

Instruction & Practice

- Assessment
- Instruction (20%)
- Practice (50%)
- Review

How can students participate in the collection of data?

- Know the aim (target level)
- Compete against self
- Beat the previous performance
- Review results with teacher
- Time and Record with Peers (grade 3+)
- Identify areas of improvement

Student Rewards

- Prizes
- Praise
- Competing with yourself
- Learning as its own reward

Decisions: How and How Often?

- Daily vs Weekly
- Aims
- Intervening Events
- Small Changes and Big Outcomes
- Big Changes: When and Why?

Stories: Success & Failure or... What we have Learned!

- K students
- Grades 1 and 2
- Middle and High School
- Students with autism
- 2-5 years of gain in a school year
- What do we do when the student does not improve?

Resources

- www.celeration.org
- <http://www.precisionteachingresource.net/>
- <http://www.rti4success.org/>
- www.zigsite.com
- www.aimsweb.com
- www.fcrr.org
- www.nasdse.org