OUR TIMELINE

• Summer, 2012
  • Review Model System
  • Planned for Pilot Roll-Out
    • Determined department(s)/level(s)
    • Determined method (local norm development)

• Fall, 2012
  • Initial Introduction to DDMs
  • Began with K-12 Specialists
    • Art, Music, Physical Education, Special Education, Guidance, Nurses, Psychologists, etc.
  • Trained Secondary Content Coordinators
OUR TIMELINE (continued)

• **Winter, 2013**
  • Pilot Administration begins
    • Required a lot of support and encouragement
  • Initial Data Analysis
  • Administrator Training on Analysis Method/Norming

• **Spring, 2013**
  • Initial Norm development
  • Individual discussions with each teacher (centrally led to build building capacity)
• First...what’s a norm?
  • a statistical concept in psychometrics representing the aggregate responses of a standardized and representative group are established for a test, against which a subject/s is/are compared

• Second...what do they do?
  • Norms allows a comparison between a single score to the entire population of others who have taken the same test.
We learned early on that we needed a process that would create one universal measurement unit to discuss student progress.
Normal, Bell-shaped Curve
HOW?

• Step One
  • Calculated the difference between Post and Pre

• Step Two
  • Find the mean (average) the difference scores

• Step Three
  • Find the standard deviation of the difference scores
Now, we’re ready to “transform” the difference scores into a universal measurement system.

• **Step Four**
  • Calculate the z-score of each individual difference score

\[
Z = \frac{(\text{observation} - \text{Mean})}{\text{Standard Deviation}}
\]

• **Step Five**
  • Calculate percentile rank for each z-score
WHAT THE PROCESS TAUGHT US

• Need for a normally distributed population
  • Are all students being reached?

• Robust Tool
  • Almost all teachers, after initial discussions, wanted/needed to revise their tools

• Outlier examination/removal (discussions)

• Made for simpler reliability and validity testing (once population is built)
LEADING AND SUPPORTING DISCUSSIONS WITH TEACHERS

• Potential for Powerful Conversations
  • “ah-ha” moments
  • Re-thinking classroom instruction
  • Re-thinking student ability/disability

• Change of Perception
  • Shift from “achievement” to “progress/gain”
  • On-going conversation is essential
  • No longer “afraid” of DDMs – understood and, in many instances, supported
  • Building Leadership essential
THE ROAD AHEAD

• What is “high”, “moderate”, “low” impact?
  • Percentile rank ranges?
• Essential that a population data-set is built
• Allows us to create level-specific norms (standard/advanced; college prep/honors/AP)
• Partnering with other local districts on norming and population development
  • Looking for others to share/partner in the development of reliable, valid tools!
QUESTIONS?