# Crunched for Time? Make the Data Work for You!

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## Intro to Data Driven Instruction

## • Buzz words

- Data Driven Decision Making (DDDM)
- High stakes accountability
- Data mining

### Importance

- Research shows "perceived improvements in teaching and student higher achievement" (Marsh, McCombs, Martorell, 2010)
- Component of RtI guides all instructional decisions
- Beginning in 2006 increasing number of grants funding research on effects of DDDM

## **Steps of Data Driven Decision Making**

- oo11 oo1 Step 1: Test Design
  - Step 2: Collect Data
  - Step 3: Analyze the Data
  - Step 4: Application of Information
  - Step 5: Reassess

- Step 1: Test Design
  - Content Alignment
- Have you covered the standards and which ones?
  - Classroom test
  - Benchmark exams
  - Are the standards assessed fairly equally?

– Genuine questions = Higher Cognitive Complexity

- Cognitive complexity
  - Bloom's Taxonomy is similar
  - Webb's Depth-of-knowledge

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- Step 2: Collect Data
  - Grade & Gather
  - Enter item responses
    - Word Table (see handout)
    - Excel Spreadsheet (best choice)

After you After you establish your establish vense method...reuse method.ecycle? and recycle?

• By hand

## oo11 oo1 Step 3: Data Analysis

- Whole test success
  - How successful are students on the entire test?
    - Mean scores
    - Skewed bell curve
- Item analysis
  - How successful are students on each item?
    - Item difficulty v. lack of knowledge of standard

- Step 4: Application of Information
  - Good question/bad question/instructional issue
- - Typically a range of 75% to 85%
  - Do you see a pattern?
  - Reteach/Review/Differentiate
    - How did our special needs students do compared to those without?
    - Look for misconceptions
      - Common whole class
      - Individual/small group

Step 5: Reassess
– WHY?

0011 0010 101• To show growth

– Use the same questions on the next test

• MUST BE ON THE SAME STANDARD(S)

Bonus Info

Comparison of class results to others/national data



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# **QUESTIONS?**