



## Assessment / Interventions Unit 8

- Overview of Assessment
- Framework for Assessment
- Models of Interventions




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### Is What Teachers Do equal to What teachers think?

- True! What we think will affect what we learn.
- Learning occurs instantaneously. T F
- You can only practice what you know. T F
- Proficiency builds gradually. T F




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### “If the student has not learned – the teacher has not taught!”

- Missing or erroneous prior knowledge may be your biggest barrier
- Task difficulty is directly related to prior knowledge.
- It is not the task it is the skill!




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## Let's Learn about Hacky Sack

- **Hacky Sack** is the trademarked name of a type of footbag. The name "hacky sack" came from the inventors of the footbag, John Stalberger and Mike Marshall. Marshall suffered a fatal heart attack in 1975, however Stalberger continued the business. At a later date, Stalberger sold the title to Wham-O.

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## Moves

- **Inside Kick**
- **Outside Kick**
- **Toe Kick**
- **Knee Kick**

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## RULES

1. **No Hands** (except when serving), **No Arms** - Shoulders are technically not allowed and are widely accepted among the average hack circle.
2. **Always serve the bag to someone else**, unless of course you are alone. Footbag is traditionally a game of courtesy, hence "The Courtesy Toss": a light lob usually toward the receiver's knee.
3. **Don't bogart that bag**. - Don't always hog it 'till you drop it because that is bad for everybody else. Being able to pass well is important to almost all footbag games.
4. **Don't say "sorry"**. Everyone makes mistakes, especially when learning, so sorries are unnecessary.
5. **Try not to give knee passes**. Passes from the knee tend to go straight to the ground.

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## Learning Process

- Learning orientation vs. performance orientation (completing the task)
- How can you show which is important in your classroom?

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## How is all of this connected to the RTI Model?



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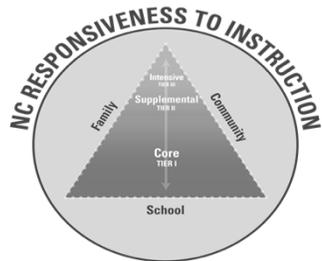
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## North Carolina RtI



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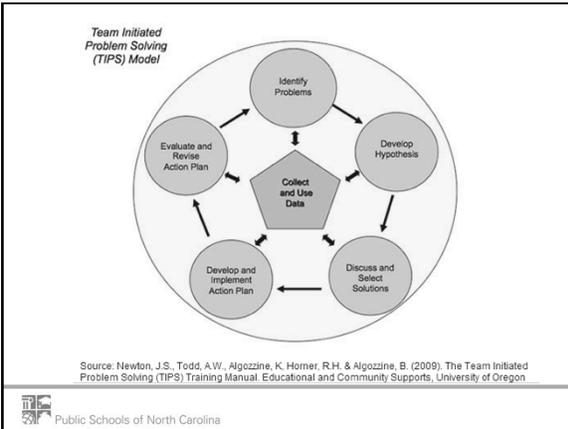
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## Fundamentals of Assessment

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## Universal Screenings

- Universal Screening is a general outcome measure used to identify underperforming students and to determine the rate of increase for students.
- Universal Screening (both high and low achievers may need interventions) G.O.M.s
- A Universal Screening will **not** identify why students are underperforming, rather it will identify which student is below / above the expected performance criteria for a given grade level in reading, writing, spelling, and math.

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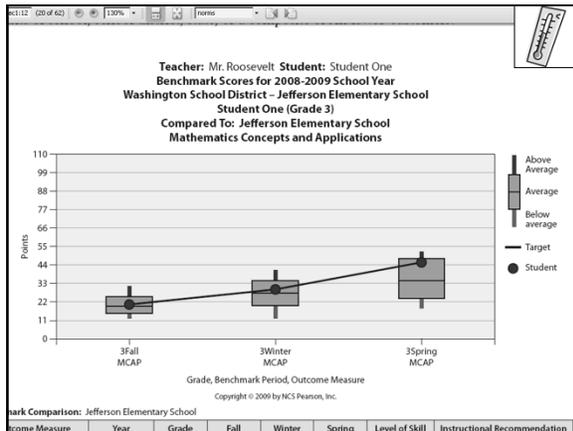
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# Number Knowledge Test

<http://clarku.edu/numberworlds>

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## Rainy-Day Math

Subtract.

*25*

A.  $\begin{array}{r} 81 \\ 95 \\ -38 \\ \hline 57 \end{array}$   $\begin{array}{r} 70 \\ 64 \\ -24 \\ \hline 40 \end{array}$   $\begin{array}{r} 51 \\ 24 \\ -28 \\ \hline 6 \end{array}$   $\begin{array}{r} 82 \\ 67 \\ -25 \\ \hline 42 \end{array}$   $\begin{array}{r} 43 \\ 48 \\ -15 \\ \hline 33 \end{array}$   $\begin{array}{r} 96 \\ 68 \\ -32 \\ \hline 36 \end{array}$   $\begin{array}{r} 61 \\ 48 \\ -22 \\ \hline 26 \end{array}$

B.  $\begin{array}{r} 30 \\ 18 \\ -25 \\ \hline 5 \end{array}$   $\begin{array}{r} 83 \\ 19 \\ -16 \\ \hline 67 \end{array}$   $\begin{array}{r} 92 \\ 13 \\ -8 \\ \hline 84 \end{array}$   $\begin{array}{r} 73 \\ 37 \\ -44 \\ \hline 29 \end{array}$   $\begin{array}{r} 52 \\ 46 \\ -14 \\ \hline 32 \end{array}$   $\begin{array}{r} 81 \\ 50 \\ -21 \\ \hline 59 \end{array}$   $\begin{array}{r} 77 \\ 9 \\ -68 \\ \hline 11 \end{array}$

C.  $\begin{array}{r} 81 \\ 26 \\ -45 \\ \hline 36 \end{array}$   $\begin{array}{r} 70 \\ 58 \\ -24 \\ \hline 34 \end{array}$   $\begin{array}{r} 22 \\ 5 \\ -71 \\ \hline 97 \end{array}$   $\begin{array}{r} 99 \\ 26 \\ -73 \\ \hline 26 \end{array}$   $\begin{array}{r} 68 \\ 59 \\ -11 \\ \hline 57 \end{array}$   $\begin{array}{r} 70 \\ 15 \\ -65 \\ \hline 5 \end{array}$   $\begin{array}{r} 53 \\ 38 \\ -25 \\ \hline 28 \end{array}$

D.  $\begin{array}{r} 61 \\ 7 \\ -57 \\ \hline 4 \end{array}$   $\begin{array}{r} 94 \\ 22 \\ -72 \\ \hline 22 \end{array}$   $\begin{array}{r} 84 \\ 78 \\ -19 \\ \hline 69 \end{array}$   $\begin{array}{r} 41 \\ 15 \\ -31 \\ \hline 10 \end{array}$   $\begin{array}{r} 73 \\ 24 \\ -51 \\ \hline 22 \end{array}$   $\begin{array}{r} 62 \\ 34 \\ -22 \\ \hline 40 \end{array}$   $\begin{array}{r} 36 \\ 27 \\ -17 \\ \hline 19 \end{array}$

E.  $\begin{array}{r} 71 \\ 42 \\ -31 \\ \hline 40 \end{array}$   $\begin{array}{r} 24 \\ 18 \\ -14 \\ \hline 10 \end{array}$   $\begin{array}{r} 85 \\ 39 \\ -54 \\ \hline 31 \end{array}$   $\begin{array}{r} 90 \\ 3 \\ -57 \\ \hline 33 \end{array}$

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# Concepts and Applications

2nd Grade Example

Name \_\_\_\_\_ Date \_\_\_\_\_ Test 3 Page 1

Column A Applications 2 Column B

(1) Write the number in each blank.

\_\_\_\_\_ two  
 \_\_\_\_\_ eleven  
 \_\_\_\_\_ thirteen

(2) Write + or - in the blank.

9 \_\_\_\_\_ 2 = 11

(3) How long is the pencil?

\_\_\_\_\_ units

(4) Counting by 3's, fill in the blanks.

84, 87, 90, \_\_\_\_\_

(5) Write the number in the blank.

1 + 7 = \_\_\_\_\_ + 1

(6) Favorite Toys

Write the number in each blank.

How many votes did video games get? \_\_\_\_\_

How many fewer votes did remote control cars get than board games? \_\_\_\_\_

How many more votes did dolls get than board games? \_\_\_\_\_

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# Scoring – Sensitivity to Differences

EXAMPLE:

By counting correct digits, it becomes easier to see small differences between students and to recognize incremental improvements in performance over time.

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# Assessment for Diagnosis & Intervention Design (Tier II and III)

Data Sources:

- Student interviews
- Conceptual understanding
- Student work
- Skill-based measurements
- Mastery Measures

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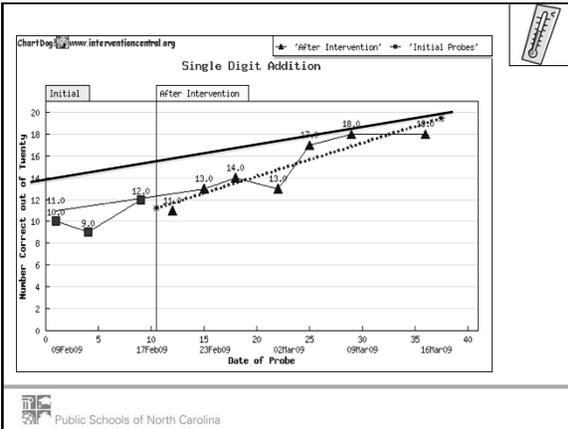
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### IES Recommendations Tier II and III

- Explicit and systematic
- Common underlying structures
- Visual representations of mathematical ideas
- Build fluent retrieval of basic arithmetic facts (at all grade levels for about 10 minutes)
- In-depth treatment of whole numbers (K-5) and on rational numbers (4-8)
- Progress monitoring
- Motivational strategies

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### Reviewing the Practice Guide

[http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti\\_math\\_pg\\_042109.pdf](http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti_math_pg_042109.pdf)

As a small group...

1. Review the IES Practice Guide
2. Consider ways in which the recommendations are related to the content of this training
3. Discuss how the practice guides might assist with intervention design and implementation

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## Intervention Ideas

- Subitizing
- eNumeracy Intervention Protocol using Number Worlds
- Number lines (games)
- Tens frames
- Structures of addition, subtraction, multiplication, division
- Diagram literacy
- Bar Models
- Conceptual story structures
- Sharon Griffin's Model of Instruction / CRA
- Hundreds boards (percentage, proportional reasoning , base ten)
- Hands on Equations

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## Intervention Ideas (con't)

How we TEACH:

- Trashketball
- Dollar Deals
- Paper Clip Chain
- Bean Party

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## Group work: Intervention Discussion

1. Read the intervention lesson
2. Discuss with the group:
  - What are your thoughts on the intervention?
  - What research backs this intervention?
  - For whom would this be applicable?

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## Web Resources for Assessment and Intervention

- Yearly Progress Pro
- <http://www.mhdigitallearning.com/>
- AIMS Web
- <http://www.aimsweb.com/>
- Intervention Central
- <http://www.interventioncentral.org/>
- Number Worlds Home
- <http://clarku.edu/numberworlds/>
- John Woodward, Transitional Math
- <http://www2.ups.edu/faculty/woodward/home.htm>
- Progress Monitoring
- <http://www.progressmonitoring.net/>
- National Center on Student Progress Monitoring
- <http://www.studentprogress.org/chart/chart.asp>



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## On-line resources to help with data

- <http://www.thatquiz.org/>
- <http://www.aimsweb.com/measures-2/>
- <http://www.easycbm.com/>
- <http://enumeracy.com/>

## Tools to enhance interventions

- <http://nlvm.usu.edu/en/nav/vlibrary.html>
- <http://illuminations.nctm.org/>
- <http://ies.ed.gov/ncee/wwc/>
- [http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti\\_math\\_pg\\_042109.pdf](http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti_math_pg_042109.pdf)
- <http://www.ncpublicschools.org/acre/standards/common-core-tools/>



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