Essential Components:

Research-Based Curriculum & Instruction
Curriculum and Instruction

• Evidence-Based Curriculum
  – Previous research
  – Ongoing local evaluation
  – Alignment with state standards

• Effective Instruction
  – A) the instructional procedures for the curriculum or intervention are clearly articulated
  – B) a process is in place to ensure that procedures are followed
  – C) the correct measures are used to evaluate outcomes that result from instructional delivery
  – D) an appropriate means of comparing student progress both with and without the intervention is in place.
BEST PRACTICE: Designing School-Wide Systems for Student Success

ACADEMIC SYSTEMS

INTENSIVE INTERVENTIONS
- Assessment-based
- High intensity

TARGETED GROUP INTERVENTIONS
- Some students (at-risk)
- High efficiency
- Rapid response

CORE PREVENTION
- All students
- Preventive, proactive

5% 80%

BEHAVIORAL SYSTEMS

TERTIARY INTERVENTIONS
- Assessment-based
- Intense, durable procedures

SECONDARY INTERVENTIONS
- Some students (at-risk)
- High efficiency
- Rapid response

5% 80%

UNIVERSAL PREVENTION
- All students, all settings
- Preventive, proactive

15% 15%
The Essential Pieces: 2 X 2 Foci in RTI Process

<table>
<thead>
<tr>
<th>School Level</th>
<th>Curriculum &amp; Instruction</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Strong research-based C&amp;I in place</td>
<td>• School-wide screening 3 times yearly (F,W,S)</td>
</tr>
<tr>
<td></td>
<td>• Uninterrupted instructional time block across school</td>
<td>• Evaluate C&amp;I effectiveness</td>
</tr>
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<td></td>
<td>• Instructional groups based on performance levels</td>
<td>• Identify “learning enabled” &amp; “at risk”</td>
</tr>
<tr>
<td></td>
<td>• School-wide screening 3 times yearly (F,W,S)</td>
<td>• Reorganize instructional groups</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Student Level</th>
<th>Curriculum &amp; Instruction</th>
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<tbody>
<tr>
<td></td>
<td>• Supplemental &amp; Strategic C&amp;I in place</td>
<td>• Progress monitoring measures in place and scheduled according to intensity of C&amp;I</td>
</tr>
<tr>
<td></td>
<td>• Additional Instructional time set and flexible (dosage)</td>
<td>• Assess intact &amp; needed skills</td>
</tr>
<tr>
<td></td>
<td>• Progress monitoring measures in place and scheduled according to intensity of C&amp;I</td>
<td>• Assess additional factors</td>
</tr>
<tr>
<td></td>
<td>• Assess additional factors</td>
<td>• Systematic review of data to inform intervention</td>
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</tbody>
</table>
Based on Tiers of Academic/Behavioral Instruction that Support Success

**Tier 1 : Core Classroom Instruction – Universal (All)**
- Instruction for ALL students
- 80 - 90 % of student population will respond successfully

**Tier 2 : Strategic Targeted Intervention- Secondary (Some)**
- Targeted Instruction addressing specific needs of students
- 5-10 % of student population will need additional supports for success

**Tier 3 : Intensive Targeted Intervention – Tertiary (Few)**
- Intensive Targeted Instruction for the most at-risk students
- 1-8 % of student population will need intensive supports for success
Tier 1: Core Classroom Instruction

• Instruction for ALL students

• 80 - 90% of student population
Core Academic Curriculum

• Reading and Math basal texts use “evidence-based” methods and are sequenced so that students can be expected to have received instruction on specific skills when they enter the next grade.

• The importance of fidelity to the sequencing is essential in RTI procedures

• Elementary grade sequencing
  – Reading – See Mapping Instructional Priorities Handout from the University of Oregon
Evidence-Based in RTI applies to:

- **Curriculum** – Core academic texts & materials
- **Instruction** – Effective delivery of curriculum
- **Positive Behavior Supports** – positive school climate supporting academic and social/behavioral success
- **Assessments** – adequate psychometric properties so that results can be trusted as accurate
“Evidence-based”

• A K A: “Scientifically-based,” “Research-based”
• What does “Evidence-based” mean?
  – demonstrated as effective by research using stringent research standards
  – multiple research studies that document similar outcomes
• Why use evidence-based approaches?
  – linked to positive outcomes for children
  – there is reliable, trustworthy, and valid evidence to suggest that when an evidence-based program is used with a particular group of children, the children can be expected to make adequate academic and/or behavioral gains
Time to Discuss & Decide

• What is your current core basal text(s) or program(s) for reading?

• Are these “evidence-based”?

• How do you know?
Why Be Concerned With Selecting Reading Programs?

• We have evidence that curriculum matters
• We need excellent materials
  – Instructional Content (PA, P, F, V, C)
  – Instructional Design
    • Systematic and Explicit
      – Explicit instructional strategies
      – Coordinated instructional sequences
      – Ample practice opportunities
      – Aligned student materials
    – Empirical Evidence
  – Teachers do not have time to develop materials
Selecting Materials
How to Select EB Core Curriculum

Handout: “Web-Based Resources”.

- Multiple Web sites where EB programs, interventions, and instructional methods have been posted as validated through research

- Some are listed as “promising” because lack of multiple research studies
Examples from FCRR
www.fcrr.org

What is included in FCRR Reports?

• Description of the reading program
• Assessments related to the program
• Alignment with the 5 essential components of reading and professional development
• Review of research (in terms of instructional content and design, as well as empirical research on the efficacy of the program)
• Strengths and weaknesses of the program
• Names and phone numbers of Florida districts that have schools who implement the program
• Link to the program's Web site
• Date the report is published
• References
How to Select EB Core Curriculum

• Contact publishers and ask for demonstration or trial period of time to evaluate effectiveness

• Continue best practice of researching possibilities well in advance of purchase

• Include teachers in previews and collaborative decisions about what is socially valid for your students and teachers
What Questions to Ask When Selecting?
(Recommendation from the International Reading Association; IRA)

• To examine match between instructional approach or program and your students, ASK does this program or instructional approach provide:

  – systematic and explicit instruction in strategies proven to relate to high rates of achievement in reading (or another subject) for who we teach?

  – flexibility for use with range of learners in various classrooms where it will be used? Are there assessment tools that assist teachers in identifying individual learning needs? Are there a variety of strategies and activities consistent with diverse learning needs?

  – a collection of high-quality materials that are diverse in level of difficulty, genre, topic, and cultural representation to meet the individual needs and interests of the children we teach?
In Addition…

To examine match between instructional approach or program and resources available for implementation, ask

What instructional personnel will be required to effectively implement the program or instructional approach?

– can the program be implemented by a classroom teacher alone, or
– will it require additional instructional personnel
In Addition…

• What types of professional development (and time) will be necessary for effective implementation of the program or instructional approach?

• What adjustments to existing academic programs and practices will be necessary for effective implementation of the program or instructional approach?
<table>
<thead>
<tr>
<th><strong>RTI PILOT SCHOOL</strong></th>
<th><strong>CORE</strong></th>
<th><strong>TIER 2 AND TIER 3 INTERVENTIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Roosevelt, Great Falls</td>
<td>Harcourt Reading Program ReadWell K, 1, Plus Read/Think Alouds Accelerated Reading</td>
<td>Soar to Success Early Steps Skill Builders</td>
</tr>
<tr>
<td>Jefferson, Glendive</td>
<td>Houghton-Mifflin K-6 Reading Lexical</td>
<td>Lindamood Bell DISTAR Reading Mastery Read Well</td>
</tr>
<tr>
<td>Gardiner</td>
<td>McGraw-Hill K-6 Reading Words in Their Way (K-3) Spellography (4-6)</td>
<td>LIPS Wilson Read Naturally</td>
</tr>
<tr>
<td>KW Harvey, Ronan</td>
<td>Success for All + (k) K inder Corner (1) Reading Roots (2-5) Reading Wings Targeted Treasure Hunts</td>
<td>SFA Tutoring Horizons Fast Track Phonics Corrective Reading</td>
</tr>
</tbody>
</table>
“We have one. Now what?”
Analyze for Strengths and Weaknesses

• Content Emphasis at Each Grade Level

• Skill Sequencing

• Degree of Systematic/Explicit Instruction
The Big Ideas for Teaching Reading

- Phonemic Awareness
- Phonics
- Fluency
- Comprehension
- Vocabulary

Teacher Training
Phonemic Awareness

Phonemic awareness is the ability to hear, identify, and manipulate individual sounds in spoken words (Torgesen, 1998).

Research
PA improves word reading, spelling, and comprehension
Poor readers who enter first grade with weak PA are most likely to be the poor readers in fourth grade

Instruction
Auditory Activities
Needs to follow the developmental hierarchy of phonological awareness
Phonics

Phonics Instruction
Systematic: pre-specified sequence of letter–sound correspondences taught in a logical order

- most common sounds taught first
- progresses from simple to more complex
- once a few letter sounds are learned, students are taught a decoding strategy
- students apply recently learned phonics to reading connected text

- Explicit
Fluency
The ability to read text quickly, accurately, and with proper expression. (NRP 2000)

Fluency Research
“Repeated and monitored oral reading improves reading fluency and overall reading achievement” (Put Reading First, p. 24).

Fluency Instruction
• Articulate the importance & provide modeling
• Reading Levels
• Monitor fluency progress
• Oral reading with feedback
• Variety of research-based strategies
  – Repeated Readings, Timed, Partner

Florida Center for Reading Research, Marcia L. Grek, Ph.D.
Vocabulary

The knowledge of the meanings and pronunciation of words that are used in oral and written language.

Vocabulary Research & Instruction

• Can be developed
  – directly (teach important, difficult, and useful words)
  – indirectly

Florida Center for Reading Research,
Marcia L. Grek, Ph.D.
Vocabulary

Vocabulary Research & Instruction

• Teach word learning strategies
  – How to use dictionaries and reference aids
  – How to use word parts to determine meaning of words
  – How to use context clues to determine meaning

• Provide multiple exposures to words

• Read aloud to students

• Encourage independent wide reading

Florida Center for Reading Research,
Marcia L. Grek, Ph.D.
Comprehension
The ability to make sense of text and to monitor for understanding.

Comprehension Research
• “Text comprehension can be improved by instruction that helps readers use specific comprehension strategies.”

• “Effective comprehension strategy instruction is explicit, or direct.”

• *Put Reading First*, pp. 49, 53

Florida Center for Reading Research, Marcia L. Grek, Ph.D.
Comprehension

Comprehension Instruction

• Monitoring comprehension (promoting metacognition)

• Using graphic and semantic organizers
  – e.g., teaching the use of a Venn diagram to compare and contrast 2 characters from a story

• Main Idea

• Summarizing

• Text Structure
Handout:

School ABC
Reading Program Inventory
Time to Discuss & Decide

• Start a “Curriculum Materials Inventory”
  (See Handout)
  – What do we already have?
    • Brainstorm all materials & programs
    • Are they Tier 1 core materials or Tier 2/3?
  – Evaluate….  
    • Evidence-Based?
    • Areas Emphasized (PA, Ph, F, V, C)?
    • Initial Instruction, Review, and/or Practice (I,R,P)?
Essential Components

EVIDENCE-BASED EFFECTIVE INSTRUCTION
Effective Instruction

• The three main components of Effective Instruction are:
  – Highly qualified (skilled) teachers
  – Explicit and systematic lessons
  – Differentiated instruction

• See Handout “Effective Instruction”
Highly Qualified (Skilled) Teachers

• Skilled teachers have a significant impact on student achievement.

• Teachers select and administer skill assessments to identify the diverse instructional needs of all students:
  – ongoing assessments measuring student achievement is the single most important determinant of the effectiveness of implemented practices.

• The best practice teaching cycle is:
  – (a) concept instruction (teach, model, practice),
  – (b) assessing for learning, and
  – (c) differentiating instruction based upon assessment data.

• When this cycle is ongoing, teaching is supported and student learning is maximized.
Ongoing Cycle:
Instruction, Assessment and Student Goals
Skilled Teachers Effectively:

• Provide explicit and systematic lessons

• Determine instructional timelines and targets

• Select and use a variety of research-based materials, including
  – core subject programs
  – appropriately leveled texts
  – hands-on materials (e.g. math manipulatives)
Explicit and Systematic Lessons

“Explicit instruction is instruction that does not leave anything to chance, and it does not make assumptions about skills and knowledge that children acquire on their own.”

Torgeson, 2004
Skilled Teachers Effectively:

• Create multiple opportunities for students to engage in sustained practice
  – opportunities in a variety of authentic and isolated contexts
    • individual
    • partner
    • small group
    • whole group

See Handouts: “Overview of SBRR teaching strategies”
“Classwide Peer Tutoring-Table 2 Procedural Comparison”
Skilled Teachers Effectively:

- Provide multiple opportunities for students to appropriately practice and apply skills in a variety of contexts
- Manage student activity and behavior
- Engage parental support
Skilled Teachers Effectively:

• Form flexible groups to meet the needs of individual students
  – one-on-one
  – pairs
  – small groups
  – whole group

• Administer progress monitoring assessments to instruct and regroup students according to student knowledge and skill acquisition.
Explicit and Systematic Lessons

“Explicit instruction is instruction that does not leave anything to chance, and it does not make assumptions about skills and knowledge that children acquire on their own.”

Torgeson, 2004
Outstanding and effective teachers understand the following sequential components of explicit instruction:

- **Direct Explanation**
  - **Names and defines** the skill to be learned. Include explanation of **why** the skill or strategy is important and **when** it is used.

- **Teacher Modeling**
  - Overtly demonstrates a skill or strategy that a student will learn. Modeling the skill provides concrete instruction, without ambiguity.

- **Guided Practice and Feedback**
  - Provides students with guidance skill or strategy is practiced independently or in small groups. Provides prompts, gives specific corrective feedback and praise related to the new skill. Support gradually fades as the student takes responsibility for using the skill independently.

- **Independent practice/Application**
  - Students are provided with multiple opportunities to apply the newly acquired skill or strategy on their own. Through independent practice, students continue to review and practice the skills and strategies learned.
GOOD TEACHING IS GOOD TEACHING

MODEL  My turn  I do it
LEAD  Our turn  We do it
TEST  Your turn  You do it

• FIRM-UP, FIRM-UP, FIRM-UP
• DELAYED TEST
Differentiated Instruction and Academic Scaffolding

When differentiating, teachers should:

• have clear objectives for instruction
• deliver targeted instruction aligned with standards
• provide focused activities
• provide academic scaffolding by adjusting the instructional complexity through differentiation

Handout: Differentiated Reading Instruction
Instructional Matching

• Instructional Matching:
  – The use of Tier 1 assessment data of student learning to organize students into the most beneficial learning communities.

• Benefits of instructional matching:
  – Students are challenged at their instructional level as opposed to not being challenged or being frustrated with what is taught.

  – Teachers have a narrower instructional range of learners to focus upon during a specified period of instruction and can therefore intensify teaching and accelerate learning.

  – A “fluid and flexible” method as students can exit and enter other learning communities as needed and indicated by data.
Instructional Matching

• Two ways to deliver instruction to groups of students with similar instructional levels:
  – “Differentiated Instruction” in the classroom
  – “Walk to (Read or Math)”

• Both require:
  – Advanced collaborative planning
  – Professional development
Motivation and Emotional Support

• Emotional Support
  – encouragement, feedback, and positive reinforcement

• Cognitive/Scaffolded Instruction
  – Carefully sequenced skills
  – Finely tuned interactions
Scaffolding Instruction

Involves interactions that support students in accomplishing mastery of a skill.
Time to Discuss & Decide

• How do you differentiate instruction at Tier 1?
• How evident is the use of effective instructional practices with all students?
• See Handouts:
  – “Checklist for Effective Instruction”
  – “Instructional Adjustments”

Review and discuss how these can be utilized in your school.
Montana RTI Self-Evaluation

Evidence-Based Curriculum
And
Effective Instruction