

Response to Intervention in General, Special, and Higher Education: What's New?

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Overview

- RtI Foundation
- IHE's Role
- Problems Identified
- New Teacher Preparation Tool-
Scientifically Based Reading Instruction
Innovation Configuration



Response to Intervention?

IDEA 2004

- November, 2004 Congress reauthorized IDEA '97, became IDEA 2004 (P.L.-108-446)
- Individuals with Disabilities Education Improvement Act (sometimes IDEIA, 2004)
- Many similarities with NCLB (No Child Left Behind)
 - Produce better outcomes for child
 - Apply instruction with strong scientific base



Response to Intervention?

- ❑ Re SLD, “...the local educational agency shall **NOT** be required to take into consideration whether the child has a severe discrepancy between achievement and intellectual ability...”
- ❑ The LEA **MAY** use a process which determines if a child responds to scientific, research-based intervention = **RtI**
- ❑ **LEAs have discretion**



RtI Core Principles

- ❑ Can effectively teach **ALL** children
- ❑ Intervene early--**Prevention**
- ❑ Use a multi-tier model of service delivery
- ❑ Use a problem-solving methodology




RtI Core Principles (2)

- Use research-based, scientifically validated interventions/instruction
- Monitor student progress to inform instruction
- Use data to make decisions
- Use assessments for three different purposes: (1) screening; (2) diagnostics; and (3) progress monitoring



Three Tenets of RtI

 Scientifically-based instruction/intervention

 Screening and Formative assessment to determine risk/inform instruction

 Decision making regarding eligibility



Changes in Legal Requirements IDEA (2004)

- “(A) **IN GENERAL.**—Notwithstanding section 607(b), when determining whether a child has a specific learning disability as defined in section 602, **a local educational agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability** in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning.



Response to Intervention (IDEA, 2004)

- “(B) **ADDITIONAL AUTHORITY.**—In determining whether a child has a specific learning disability, a local educational agency may use **a process that determines if the child responds to scientific, research-based intervention** as a part of the evaluation procedures described in paragraphs (2) and (3).



Response to Intervention (IDEA, 2004)

- Exclusion factors ...that the disability is not the result of a “lack of appropriate instruction in reading, including the essential components of reading instruction...” 20 U.S.C. 1414(b)(5)(A-C)



Final Regulation

NEW AND SIGNIFICANT:

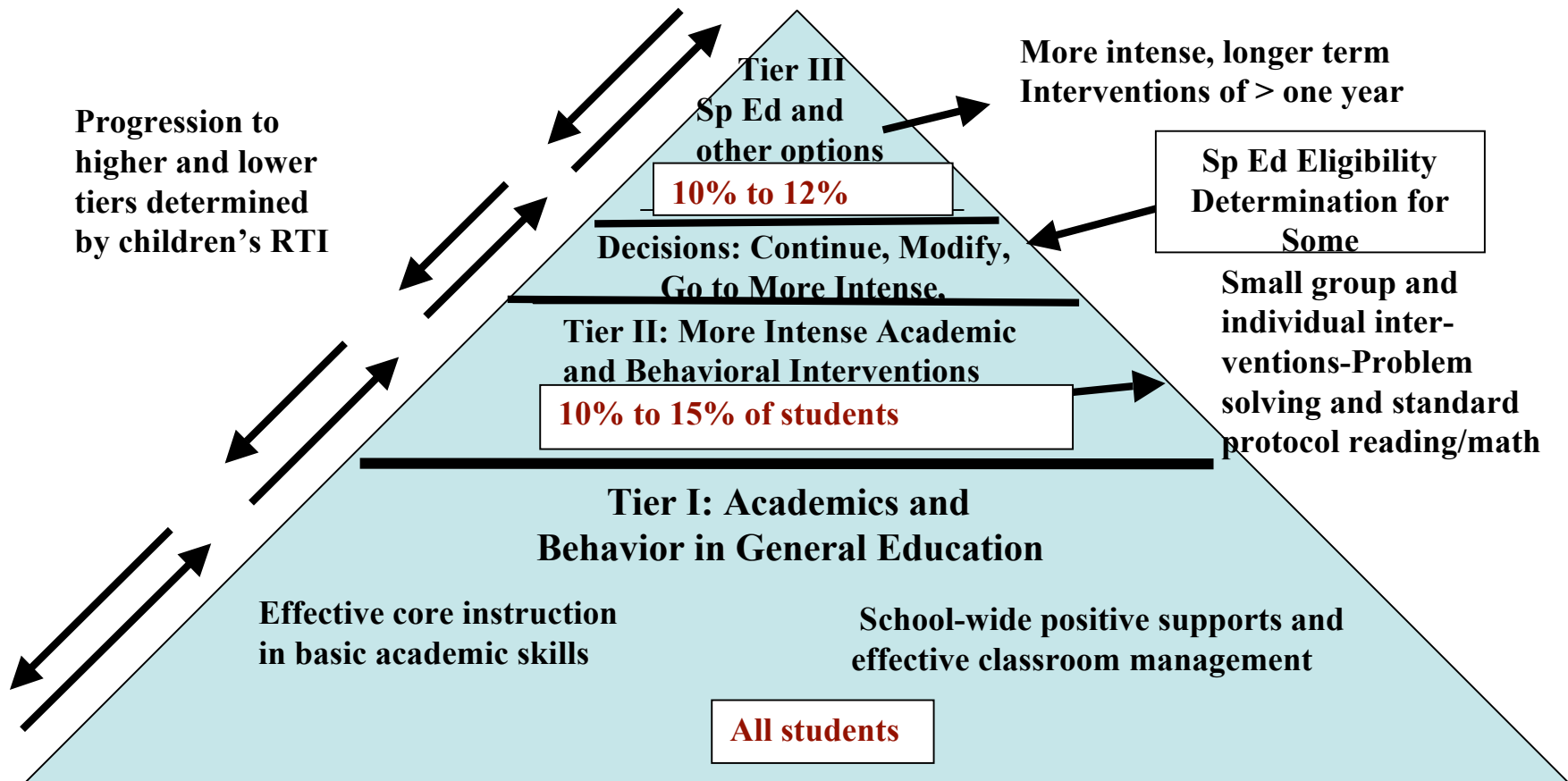
- (b must consider, as part of the evaluation described data that demonstrates that—
 - (1) Prior to, or as a part of the referral process, the child was provided appropriate high-quality, research-based instruction in regular education settings, consistent with section 1111(b)(8)(D) and (E) of the ESEA, including that the instruction was delivered by qualified personnel;
and



Use research-based, scientifically validated interventions/instruction

- NCLB and IDEA 2004 both require the use of scientifically-based curricula and interventions

Multi-tiered System with Tiers Varying in Intervention Intensity and Measurement Precision





- **NEW AND SIGNIFICANT:**

- (2) Data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction, was provided to the child's parents.



Formative Evaluation

- ❑ Frequent assessment of progress
- ❑ Referenced to goals based on benchmarks toward passing state tests
- ❑ Decision rules regarding modification of goals or instructional programs
- ❑ All decisions about student needs and instructional intensity are based on child RtI



Characteristics of Effective Formative Evaluation Measures

- ❑ Direct measures of skills
- ❑ Natural settings
- ❑ Efficient re: costs and time required
- ❑ Sensitive to small increments of growth in relevant skills
- ❑ Results can be graphed in relation to goals
- ❑ Reliable in terms of stability
- ❑ Valid re: relationship to broad indicators of competence
- ❑ Example: CBM oral reading fluency and reading comprehension



Tier I: General Education, Universal Stage, Primary Prevention

- Academics and Behavior
 - Scientifically-based
 - Explicit instruction
 - Systematic intervention
 - Formative assessment
 - Inter-related, reciprocal relationships, mutually supported



Tier I: Academic Interventions

- Scientifically-based instruction in reading
 - Curricula-content-Big ideas, e.g., reading
 - Phonemic Awareness
 - Alphabetic principle
 - Fluency
 - Vocabulary
 - Comprehension



What are IHEs doing to prepare teachers?

Study of IHEs pre-service preparation in reading

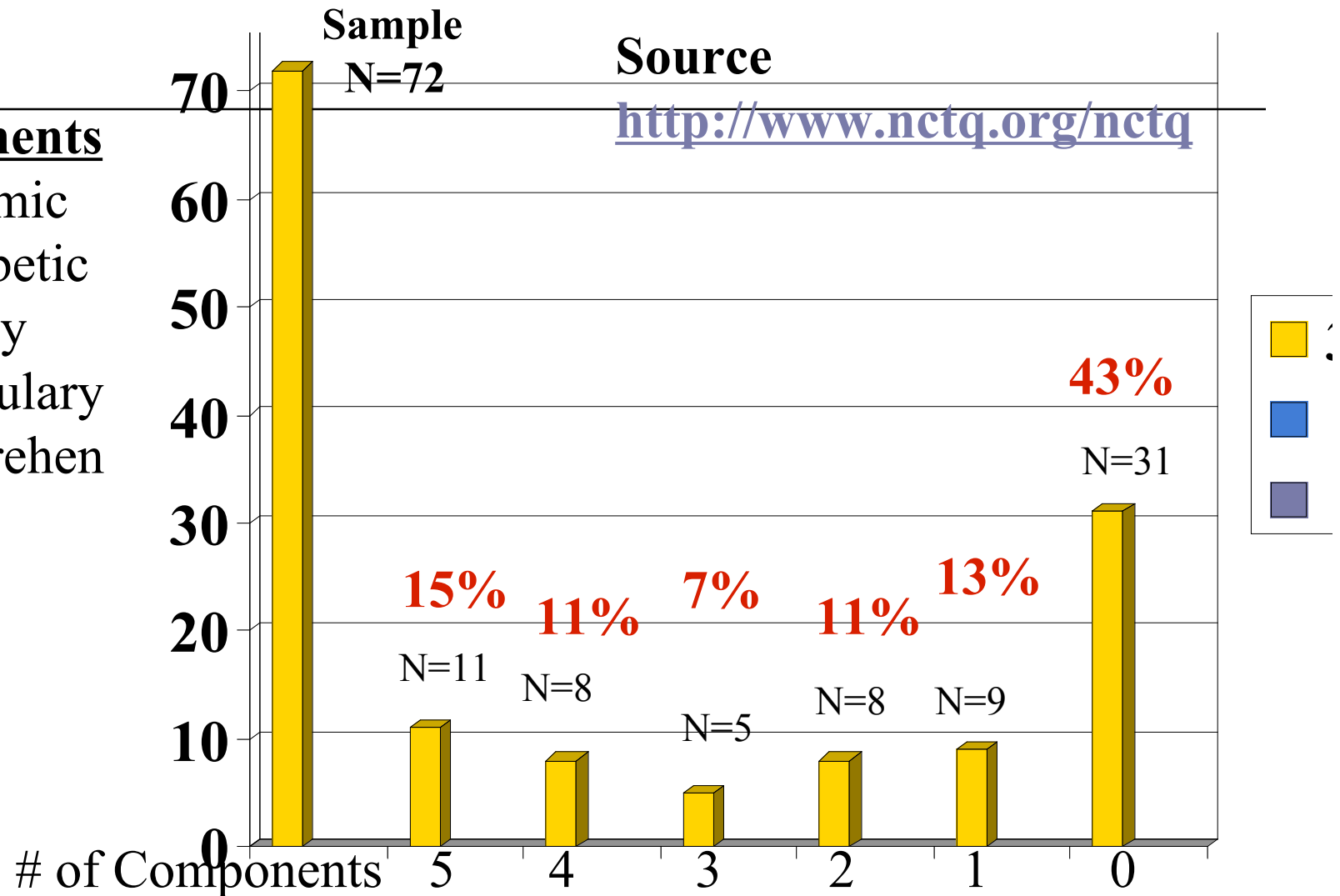
- 11 of 72 schools, taught all 5 essential reading components specified in NRP (2000)
- many taught none,
- see <http://www.nctq.org/nctq/>

IHEs and SBRR Five Components of Reading



5 Components

- Phonemic
- Alphabetic
- Fluency
- Vocabulary
- Comprehension





Are IHEs presenting the important components of reading instruction?

Are preservice teachers being taught how to assess children's reading difficulties and intervene early to prevent reading problems?



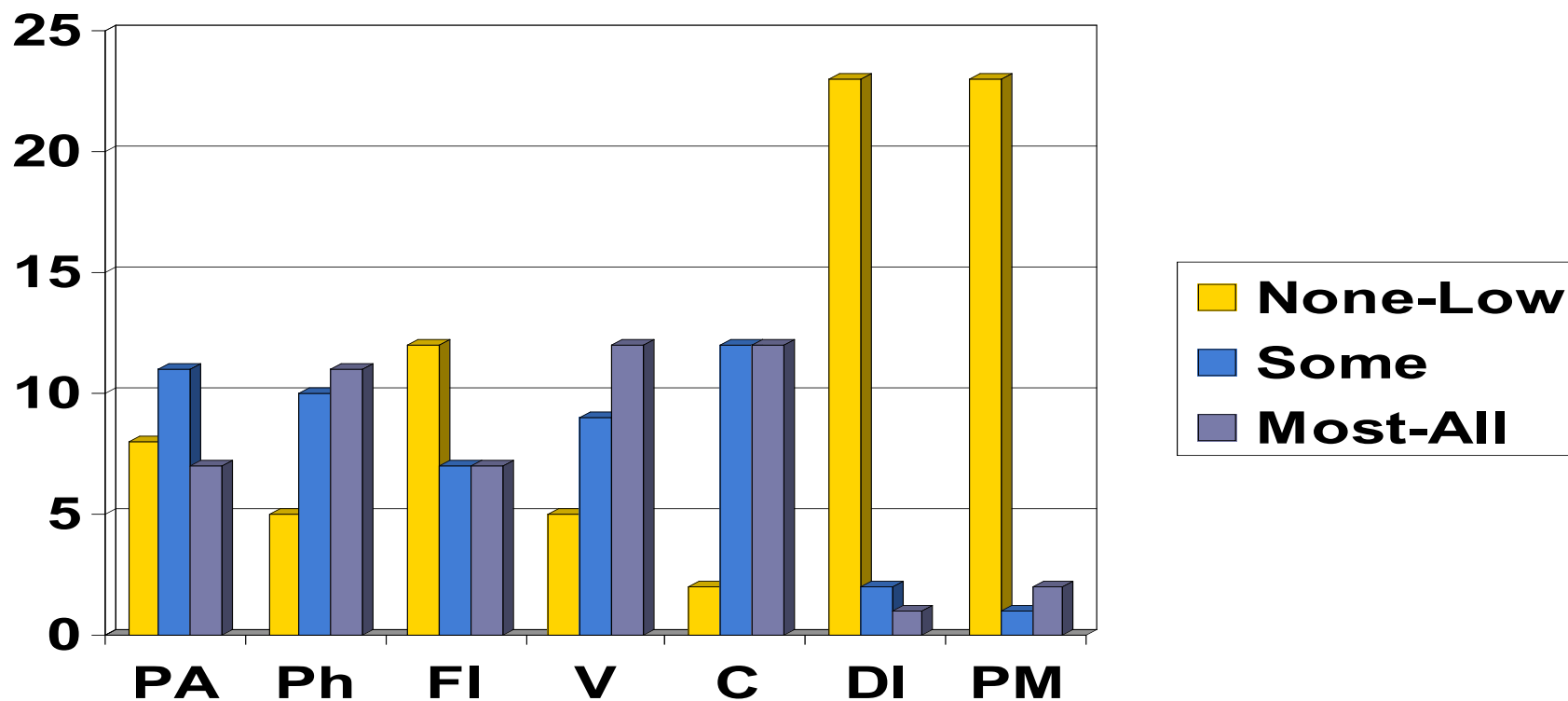
□ McCombes-Tolis & Spear-Swerling (2007)

- 28 syllabi, 9 institutions
- 35.7% addressed both phonics and comprehension
- 25% addressed phonemic awareness
- 14.3% referenced formative assessment

Limited evidence of application...

Preparation of Special Education Teachers in Scientifically-Based Reading Instruction

N=26 of 31 Programs in a large state





Preparation of Special Education Teachers in Scientifically-Based Reading Instruction


- About 50% mentioned comprehension, vocabulary, phonics
- About 30% mentioned phonemic awareness, fluency
- **HOWEVER**, other critical components were not taught well



Gaps in scientifically-based instructional principles

- ❑ Integration
- ❑ Systematic and explicit instruction
- ❑ Screening and progress monitoring

Those being trained as SPED teachers were no better prepared than teachers being prepared to teach gen'ed students



Particularly alarming in the RtI framework because in many models the SPED teacher may be looked upon as the educator who has the more sophisticated toolbox!

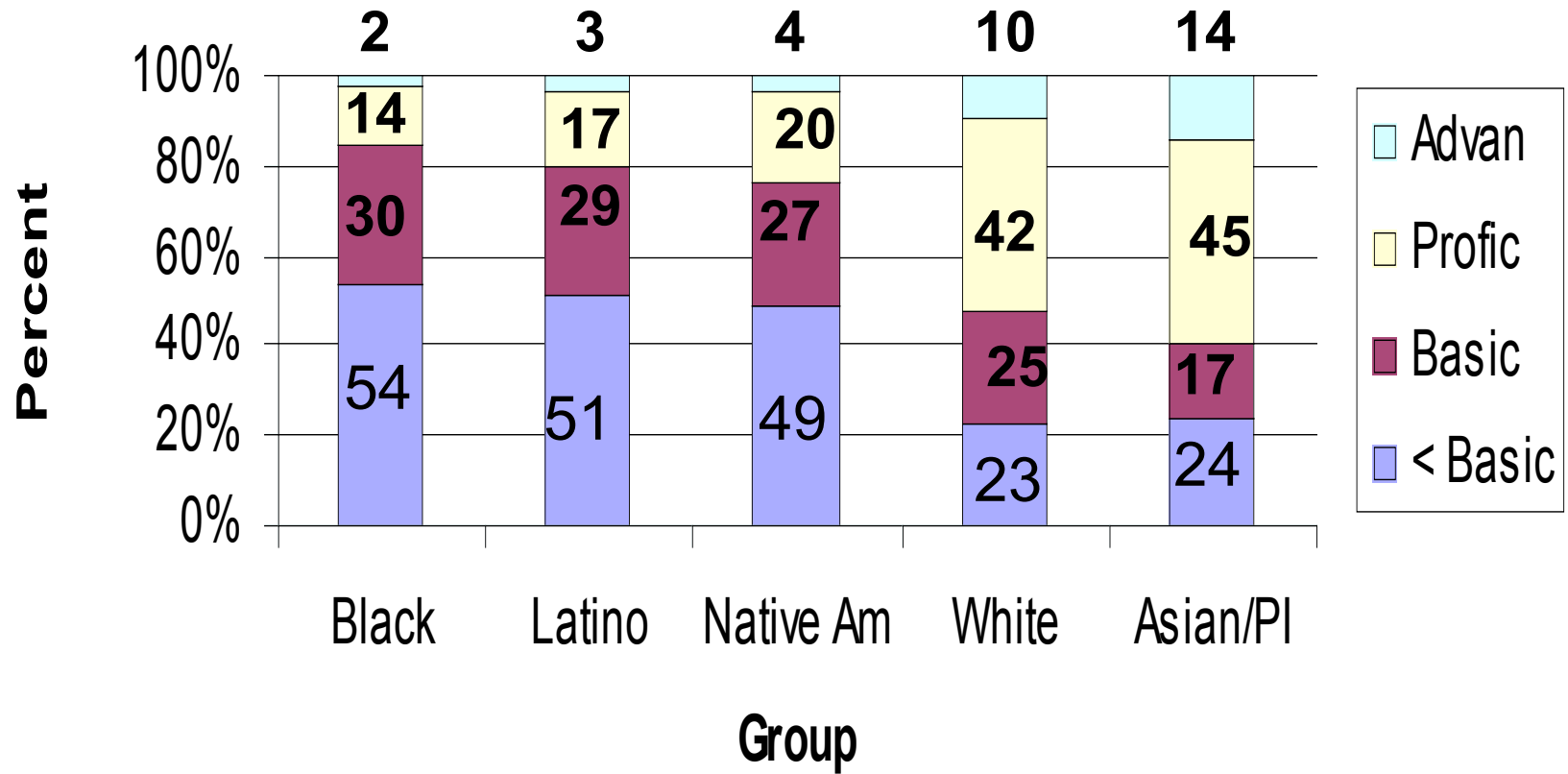


The Promise and the Challenge of Reading Instruction

- Early development of strong reading skills is critical
- Students who read below basic level in Grade 4 are not likely to read at basic or proficient level by the end of Grade 12
- Those students are at high risk for poor education outcomes, e.g. course failures, grade retention, dropping out



NAEP 2007 4th Grade Reading





Scientifically-Based Reading Instruction Innovation Configuration

- Tool designed to analyze and evaluate teacher preparation coursework and professional development programs through course syllabi
- Use the SBRI Innovation Configuration to evaluate teacher preparation course syllabi for SBRR principles




What is an Innovation Configuration?

- Used for more than 30 years in development and implementation of educational innovations and methodologies. (Hall & Hord, 1987; Roy & Hord, 2004)
 - Evaluate programs
 - Evaluate fidelity of implementation of educational interventions
 - Most commonly, professional development tools (i.e., guide implementation of innovation within a school and to facilitate the change process)



Application of Reading Innovation Configuration

- IHE faculty self-assessment of reading instruction competencies
- IHE department heads, deans, and other university administrators interested in ensuring high-quality instruction in teacher preparation programs
- State departments of education seeking to unify instruction statewide with common language and goals consistent with federal policy (e.g., Maryland and Colorado)

- 
-
- ❑ Design professional development
 - ❑ Evaluate professional association standards
 - ❑ Evaluate state licensure and teacher education program approval requirements
 - ❑ Evaluate Continuing Education



Scientifically-Based Reading Instruction Innovation Configuration (SBRI-IC)

- Smartt, S. M., & Reschly, D. J. (2007). *Barriers to the preparation of highly qualified teachers in reading* (TQ Research & Policy Brief). Washington, DC: National Comprehensive Center for Teacher Quality. (www.NCCTQ.org)
- Rationale: Too many students read below basic levels
- Many teacher education and professional development programs do not implement the scientifically based research on reading

What Is the Scientifically-Based Reading Instruction IC?

- ❑ Tool used to evaluate teacher preparation coursework (syllabi)
- ❑ Specifically assess the degree to which selected evidence-based practices are implemented in required reading courses
- ❑ Established through tables with two dimensions:

 Key essential components

 Levels of implementation



Scientifically Based Reading Instruction – Innovation Configuration

- Essential Key Components (Content Validity)

- *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998).
- *Teaching Children to Read: An Evidence Based Assessment of the Scientific Research Literature on Reading and Its implications for Reading Instruction* (National Reading Panel, 2000).

<http://www.nichd.nih.gov/publications/nrp/smallbook.pdf>



Key Essential Components

- ❑ Scientifically-based reading research/
NCLB/IDEA
- ❑ Phonemic awareness
- ❑ Phonics
- ❑ Fluency
- ❑ Vocabulary
- ❑ Comprehension
- ❑ Integration
- ❑ Systematic and explicit instruction
- ❑ Screening and progress monitoring assessment
Reliability – approximately .85



Levels of Implementation

- ❑ ***No mention.*** The component is not mentioned (Code = 0)
- ❑ ***Mentioned.*** The component is mentioned (Code=1).
- ❑ ***Mentioned, plus readings/tests*** are specified (Code=2).
- ❑ ***Mentioned, plus readings/tests, PLUS assignments such as papers, projects*** are required (Code=3).
- ❑ All prior levels, ***PLUS supervised practice (field work) with feedback about degree of success*** are required (Code=4).

Abbreviated Innovation Configuration Example

Component/ Implement	None	Aware	Knowledge	Teaching Practices
Phonemic Awareness				
Phonics				
Fluency				
Vocabulary				
Comprehension				
Integration of Components				

Scientifically Based Reading Instruction Innovation Configuration

Instructor teaches <u>Components</u>	Code=0	Code=1	Code=2	Code=3	Code=4
<p>SBRR/NCLB/IDEA</p> <ul style="list-style-type: none"> • <i>Preventing Reading Difficulties in Young Children</i> (1998) • National Reading Panel Report (2002) • Reading success for all students • Scientifically based research – randomized studies, peer reviewed, replicated, minimize bias • NCLB law - mandates SBRR. • Research-based strategies • Essential Elements of Reading: (Phonemic Awareness, Phonics, Fluency, Comprehension, Vocabulary) 	<p>No evidence that teaching SBRR/NCLB/IDEA as part of reading instruction is included in the class syllabus</p>	<p>SBRR/NCLB/IDEA mentioned in class syllabus</p>	<p>SBRR/NCLB/IDEA mentioned in class and required readings and tests and/or quizzes</p>	<p>SBRR/NCLB/IDEA mentioned in class, with readings, tests, and assignments, projects for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>SBRR/NCLB/IDEA mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring
<p>Phonemic Awareness</p> <p>(This is ideally subsumed under the broader topic Phonological Awareness)</p> <ul style="list-style-type: none"> • Individual speech sounds, phonemes • Precursor to phonics • Detect, segment, blend, manipulate phonemes (sounds) ex. /b/ /a/ /t/ =bat • Rhyming, alliteration in preschool, K • Ability to manipulate sounds at the phoneme (sound) level • Elkonin boxes – common activity 	<p>No evidence that teaching Phonemic Awareness as part of reading instruction is included in the class syllabus</p>	<p>Phonemic Awareness mentioned in class syllabus</p>	<p>Phonemic Awareness mentioned in class and required readings and tests and/or quizzes</p>	<p>Phonemic Awareness mentioned in class, with readings, tests, and assignments, projects, for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>Phonemic Awareness mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring
<p>Phonics</p> <ul style="list-style-type: none"> • Correspondence of sounds and letters • Phoneme-grapheme correspondences • Blending, decoding, encoding • Syllable types • Prefixes, suffixes, base words • Non-sense words (assessment) • Alphabetic Principle • Word Analysis • Words are composed of letters (graphemes) that map to phonemes • Letters & sounds work in systematic way 	<p>No evidence that teaching Phonics as part of reading instruction is included in the class syllabus</p>	<p>Phonics components mentioned in class syllabus</p>	<p>Phonics components mentioned in class and required readings and tests and/or quizzes</p>	<p>Phonics components mentioned in class, with readings, tests and assignments, projects, for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>Phonics components mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring

Scientifically Based Reading Instruction Innovation Configuration

Instructor teaches <u>Components</u>	Code=0	Code=1	Code=2	Code=3	Code=4
<p>Fluency</p> <ul style="list-style-type: none"> • Rate, accuracy, and prosody • Repeated Readings • Fluency Training • Partner Reading • Measurable goals • Chart progress 	<p>No evidence that teaching Fluency as part of reading instruction is included in the class syllabus</p>	<p>Fluency mentioned in class syllabus</p>	<p>Fluency mentioned in class and required readings and tests and/or quizzes</p>	<p>Fluency mentioned in class, with readings, tests and assignments, projects, for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>Fluency mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring
<p>Vocabulary</p> <ul style="list-style-type: none"> • Taught directly and indirectly • Pre-teach • Oral Language • Multiple contexts, meanings • Choosing and leveling words for explicit instruction • Word Consciousness • Context • Morphemes 	<p>No evidence that teaching Vocabulary as part of reading instruction is included in the class syllabus</p>	<p>Vocabulary mentioned in class syllabus</p>	<p>Vocabulary mentioned in class and required readings and tests and/or quizzes</p>	<p>Vocabulary mentioned in class, with readings, tests and assignments, projects, for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>Vocabulary mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring
<p>Comprehension</p> <ul style="list-style-type: none"> • Questioning strategies (i.e. before, during, and after reading) • Summarize/predict/retell • Metacognitive Strategies • Teach both narrative and expository text structure • Collaborative Strategic Reading 	<p>No evidence that teaching Comprehension as part of reading instruction is included in the class syllabus</p>	<p>Comprehension mentioned in class syllabus</p>	<p>Comprehension mentioned in class and required readings and tests and/or quizzes</p>	<p>Comprehension mentioned in class, with readings, tests and assignments, projects for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>Comprehension mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring

Scientifically Based Reading Instruction Innovation Configuration

Instructor teaches <u>Components</u>	Code=0	Code=1	Code=2	Code=3	Code=4
<p>Integration</p> <ul style="list-style-type: none"> Planned connections of instruction for 5 essential elements of reading Weaving of 5 essential components of reading (or any combination of components), first taught in isolation, always placed back in meaningful context Integrated 	<p>No evidence that teaching <i>Integration</i> as part of reading instruction is included in the class syllabus</p>	<p>Integration mentioned in class syllabus</p>	<p>Integration mentioned in class and required readings and tests and/or quizzes</p>	<p>Integration mentioned in class, with readings, tests and assignments, projects for application</p> <ul style="list-style-type: none"> Observations Lesson Plans Clstrm Modeling 	<p>Integration mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> Field Work (practicum) Tutoring
<p>Systematic Instruction</p> <ul style="list-style-type: none"> Planned/purposeful/sequential Step-by-step Teach from easy to difficult, e.g., certain letters (b, m, a) before others (y, x, tch). Directions for determining if reading programs use skills sequence & provide adequate practice 	<p>No evidence that teaching <i>Systematic Instruction</i> as part of reading instruction is included in the class syllabus</p>	<p>Systematic Instruction mentioned in class syllabus</p>	<p>Systematic Instruction mentioned in class and required readings and tests and/or quizzes</p>	<p>Systematic Instruction mentioned in class, with readings, tests and assignments, projects for application</p> <ul style="list-style-type: none"> Observations Lesson Plans Clstrm Modeling 	<p>Systematic Instruction mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> Field Work (practicum) Tutoring
<p>Explicit Instruction</p> <ul style="list-style-type: none"> Direct/straight forward No room for guessing Example: This is the letter B, it represents the /b/ sound. I do it, we do it, you do it 	<p>No evidence that teaching <i>Explicit Instruction</i> as part of reading instruction is included in the class syllabus</p>	<p>Explicit Instruction mentioned in class syllabus</p>	<p>Explicit Instruction mentioned in class and required readings and tests and/or quizzes</p>	<p>Explicit Instruction mentioned in class, with readings, tests and assignments, projects for application</p> <ul style="list-style-type: none"> Observations Lesson Plans Clstrm Modeling 	<p>Explicit Instruction mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> Field Work (practicum) Tutoring

Scientifically Based Reading Instruction Innovation Configuration

Instructor teaches <u>Components</u>	Code=0	Code=1	Code=2	Code=3	Code=4
<p>Screening Assessment</p> <ul style="list-style-type: none"> • Early identification and prevention • Brief measures • ALL students • Identifying students that require additional support • Valid and reliable instruments 	<p>No evidence that teaching <i>Screening Assessment</i> as part of reading instruction is included in the class syllabus</p>	<p>Screening Assessment mentioned in class syllabus</p>	<p>Screening Assessment mentioned in class and required readings and tests and/or quizzes</p>	<p>Screening Assessment mentioned in class, with readings, tests and assignments, project for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>Screening Assessment mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring
<p>Progress Monitoring Assessment</p> <ul style="list-style-type: none"> • On-going and frequent assessment for those requiring additional support • Provide additional support, monitor every 1-2 weeks, etc. • Instructional modifications made accordingly • Reflects appropriateness of the teacher's intervention 	<p>No evidence that teaching <i>Progress Monitoring</i> as part of reading instruction is included in the class syllabus</p>	<p>Progress Monitoring mentioned in class syllabus</p>	<p>Progress Monitoring mentioned in class and required readings and tests and/or quizzes</p>	<p>Progress Monitoring mentioned in class, with readings, tests and assignments, projects, for application</p> <ul style="list-style-type: none"> • Observations • Lesson Plans • Clsrn Modeling 	<p>Progress Monitoring mentioned in class, req. rdg, tests-quizzes-assignments, projects, and teaching with application and feedback</p> <ul style="list-style-type: none"> • Field Work (practicum) • Tutoring


Scientifically Based Reading Instruction Innovation Configuration

	Code = 0	Code = 1	Code = 2	Code = 3	Code = 4	Rating
<p>Instructions: Place an X under the appropriate level of implementation for each course syllabus that meets the criteria specified from 0–4. Score and rate each item separately.</p> <p><i>(See bulleted descriptors on SBRI Rubric as examples of content or wording that MAY be included within each of the component areas).</i></p>	No evidence that the component is included in the class syllabus.	Syllabi mentioned component in class syllabus.	Syllabi mentioned component in class and required readings and tests and/or quizzes.	Syllabi mentioned component in class, with readings, tests, and assignments, projects for application: observations, lesson plans, classroom modeling, etc.	Syllabi mentioned component in class with readings, tests, assignments, projects, and teaching with application and feedback: field work (practicum), tutoring, etc.	The rating in this column is the highest score for any syllabus on each of the respective components.
Scientifically Based Reading Research (SBRR), NCLB, IDEA						Rating:
Phonemic Awareness						Rating:
Phonics						Rating:
Fluency						Rating:
Vocabulary						Rating:
Comprehension						Rating:
Integration						Rating:
Systematic Instruction						Rating:
Explicit Instruction						Rating:
Screening Assessment						Rating:
Progress Monitoring Assessment						Rating:
Column Totals		Susan Smartt IDA 2007				



Closing

- ❑ Success of RtI depends on many factors: adequate resources, strong school leadership, sound curriculum;
- ❑ Knowledgeable educators are essential;
- ❑ RtI models cannot afford inadequately prepared teachers

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- ❑ Reading is the area with the most extensive research base;
 - ❑ Reading is primary skill most often lacking in struggling students, and most central to school/life success.
 - ❑ Teacher preparation presents serious challenges to the implementation of RtI (Spear-Swerling, 2007)

Scientifically-Based Reading Instruction Innovation Configuration

Links: Research → Policy → Practice

Promising contribution addressing the
challenges of Rtl



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