

Using RTI to Improve Outcomes Across Domains in Washington, DC Preschools



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for Education Innovation

About AppleTree

AppleTree is a nonprofit that provides proven-effective early language and literacy programs to the most underserved three- and four-year-olds to close the achievement gap before students enter kindergarten.



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Who We Are

The AppleTree Institute for Education Innovation was founded in DC in 1996 by Jack McCarthy, a leader in business, to increase the supply of quality public schools in the District of Columbia.

After supporting secondary schools filled with students in need of significant remediation, Jack decided to focus on creating preschools that closed the achievement gap before children entered kindergarten.

The AppleTree Early Learning Public Charter Schools were established as innovation incubators for the Institute

Today, both organizations work in partnership to serve nearly 700 children in seven schools across DC



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Results in Closing the Achievement Gap

Students who receive two years of AppleTree are better off to face life's challenges than peers not receiving AppleTree.

AppleTree graduates:

- Recognize 25% more letters in Kindergarten
- Have better oral reading fluency in 1st grade (20% higher on assessments)
- Are stronger oral readers by 2nd grade (70% higher)

Research shows these are precursors for success throughout school and life.



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How Did We Get Here?



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DC Partnership for Early Literacy

AppleTree Institute's efforts to improve and scale early childhood efforts across the District.

Six year effort that has included work at charters and DCPS schools.

Activities funded predominantly through US Dept. of Ed Early Reading First grant.



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Original Program

- ✓ Warm engaging classrooms
- ✓ Language & print-rich environment
 - Old ELLCO
- ✓ Scientifically-based core curriculum with specific scope and sequence
 - DC Standards & OWL curriculum
- ✓ Baseline and outcome assessments
 - PALS PreK, PPVT, EOWPVT, TEMA
- ✓ Extensive professional development



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Instructional Model

- ✓ Integrated Instruction – curriculum supports thematic learning
- ✓ Balance of teacher-directed and exploratory learning
- ✓ High levels of teacher interaction during all types of learning activities
- ✓ Play staged to support learning
- ✓ Children achieve and develop motivation & self-esteem

(Neuman, 2006)



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Original Assessment Battery

Domain	Screener (baseline)
Vocabulary	Peabody Picture Vocabulary Test, Expressive Vocabulary Test
Alphabet Knowledge	PALS PreK
Print Knowledge	PALS PreK
Phonological Awareness	PALS PreK
Math	TEMA
Instructional Quality (Teacher)	ELLCO & CLASS

Why RTI?

The data analyses consistently show that those children likely to leave “at risk” are those who have the most under-developed skills at fall entrance. Thus, the importance of providing supplemental preventive tiers of... is warranted...they will benefit from a combination of high-quality classroom instruction supplemented with additional ‘dosage’ of the classroom instructional content.

Dr. Laura Justice
ERF Program Evaluation
2005-2006



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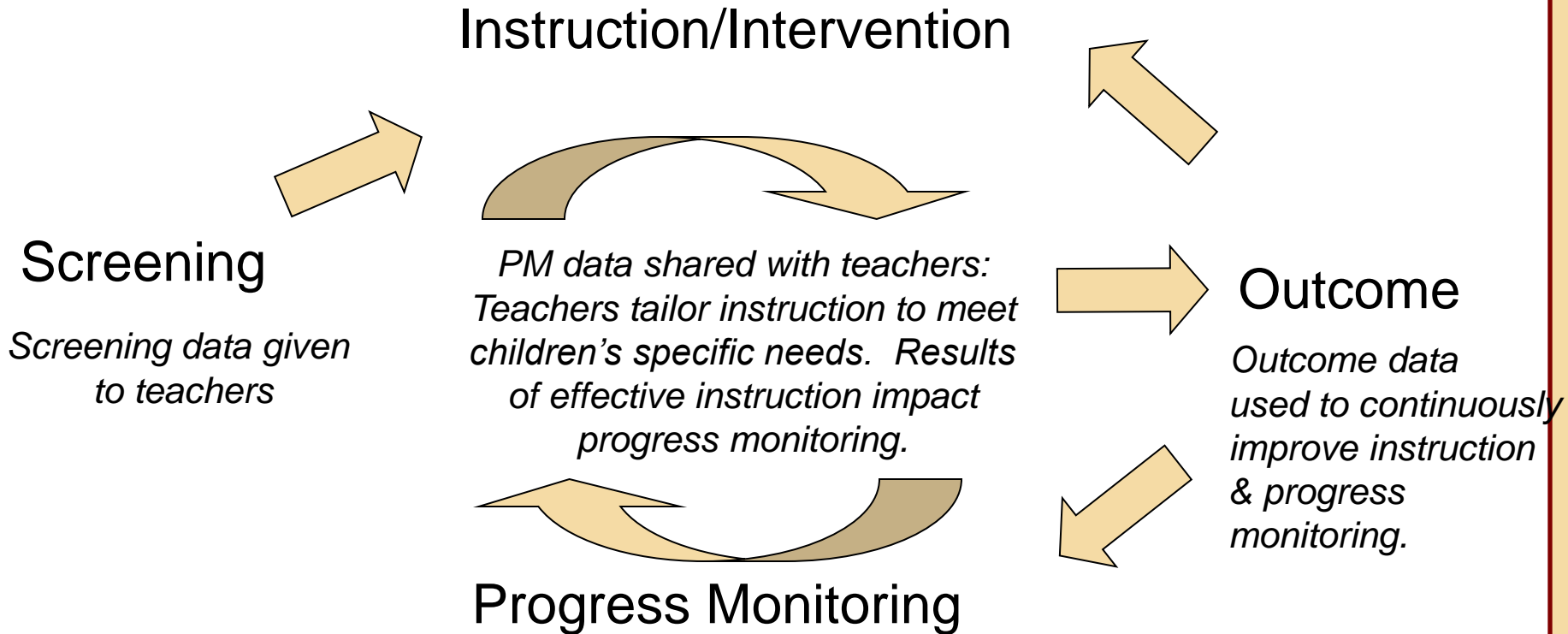
Response to Intervention Components

- ✓ Universal Screening - what does the child know before instruction
- ✓ High Quality Tier I Instructional Program – evidence-based curriculum, high levels of instructional quality
- ✓ Regular Progress Monitoring - is the child learning
- ✓ Implementation of Evidence-based Interventions - extra supports for children not making progress
- ✓ PM during Intervention - is the intervention working



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How Data Are Used



Additions to Tier One

Added more targeted, meaningful program standards to the DC Standards

Added Curriculum Resources Beyond OWL (*PreK Math, Second Step, Avenues, Signing Time*)

Developed Core Competencies for Teachers and the Quality Indicator Observational Assessment

Added internal capacity for data analysis



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Added for Tier Two

Developed Intervention Database across
Domains

Added Weekly Coaches' Training to
support the use of data

Developed an RTI Decision-Making Protocol

Developed an RTI planning protocol

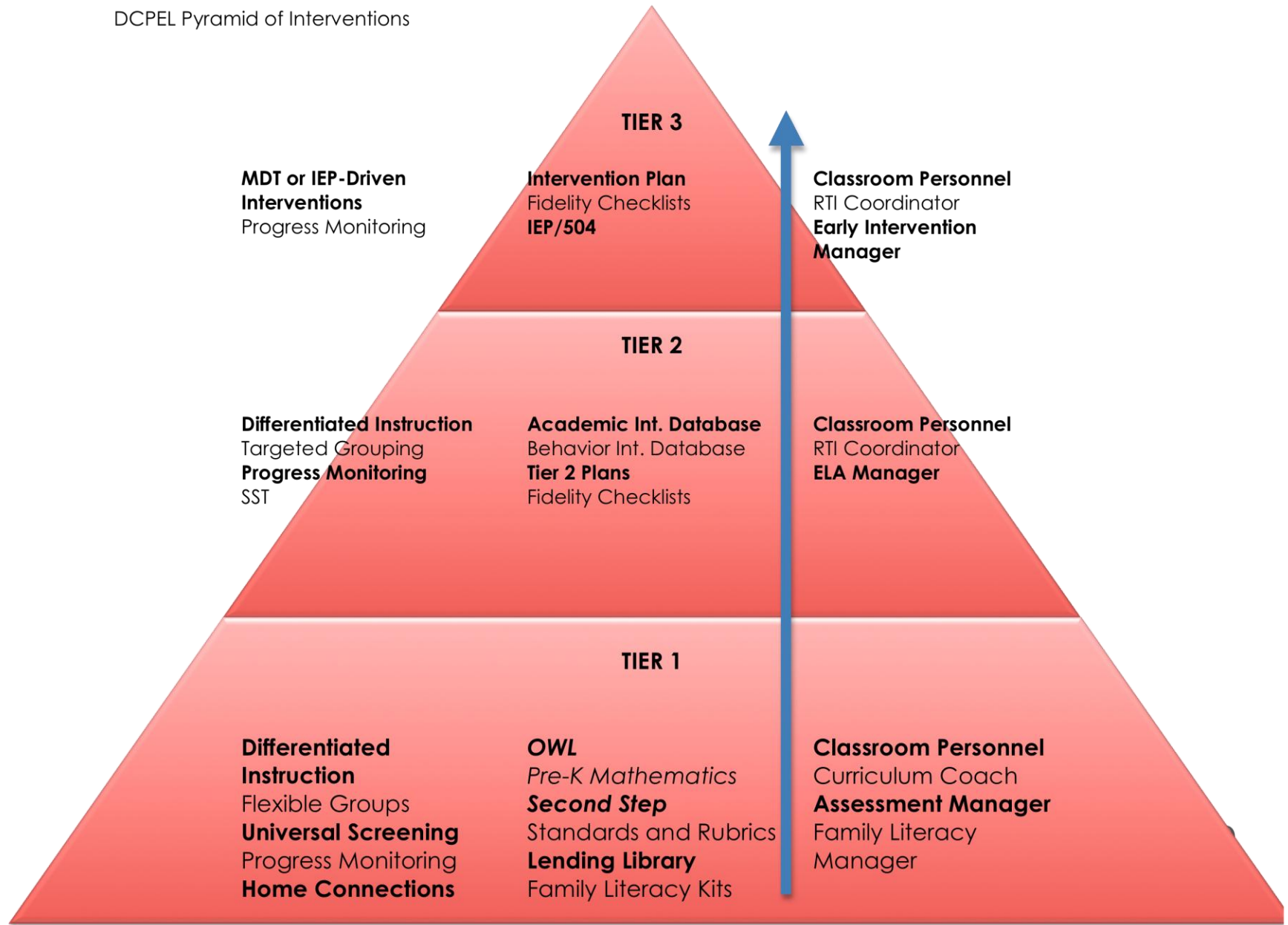
Added significant coaching and workshop
support

RTI data management system



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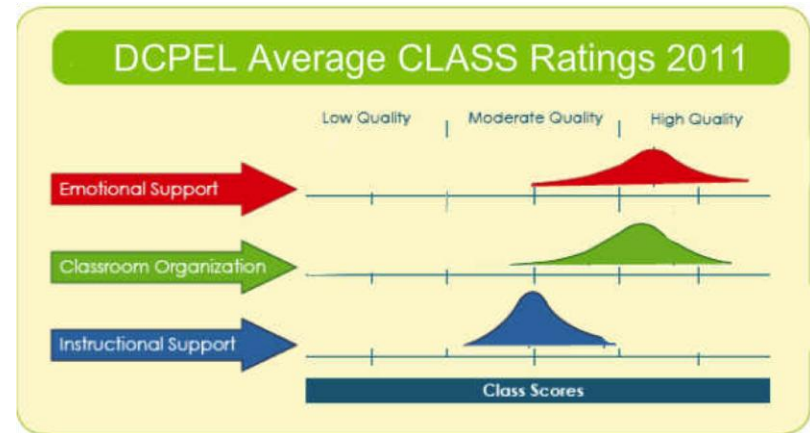
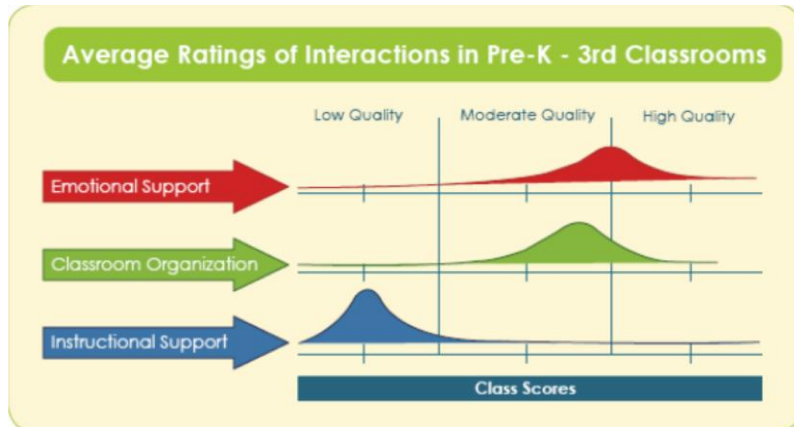
DCPEL Pyramid of Interventions



Added Progress Monitoring

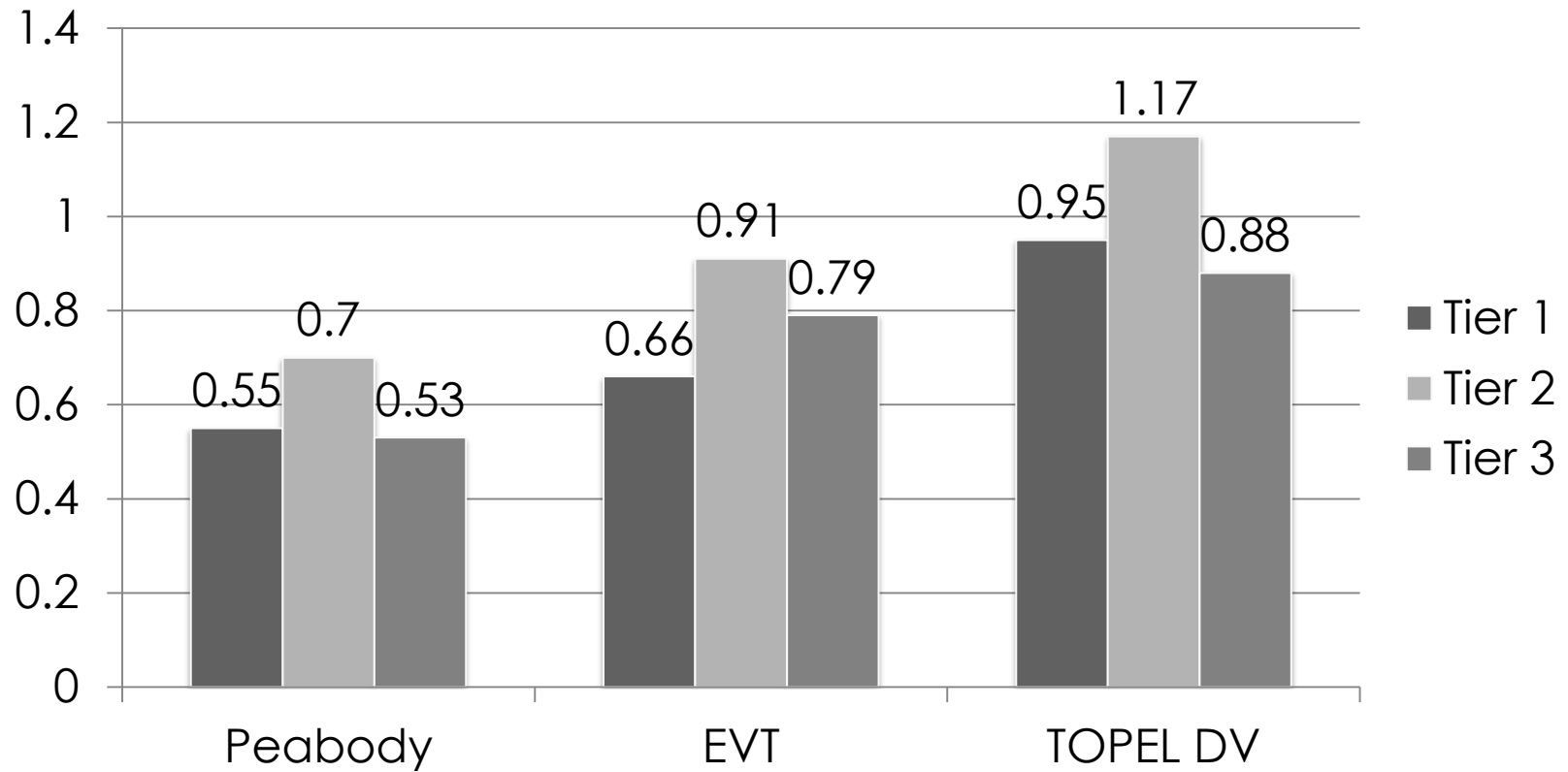
Domain	Screenener (baseline)	Progress Monitor
Vocabulary	PPVT, EVT, TOPEL	IGDI –one minute picture-naming task
Alphabet Knowledge	PALS LS, Letter ID	PALS LS, Letter ID
Print Knowledge	TOPEL	Get Ready To Read, PALS Name Writing
Phonological Awareness	TOPEL	Get Ready to Read
Math	TEMA	Project developed direct
Social/Emotional	Teacher Child Rating Scale	Observation
Instructional Quality	ELLCO, CLASS	Quality Indicator

Classroom Quality



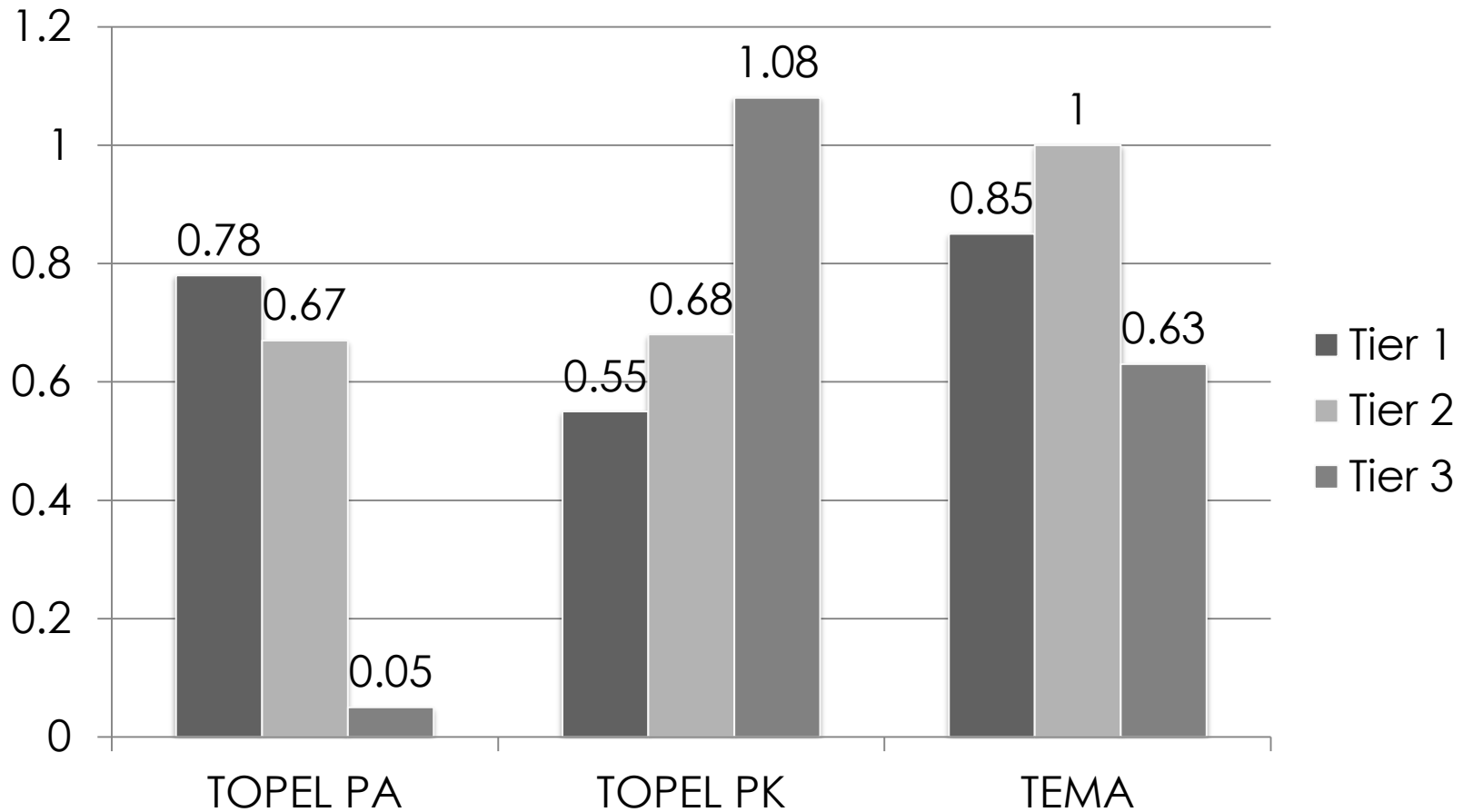
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Effect Sizes for Vocabulary Assessments by Tier



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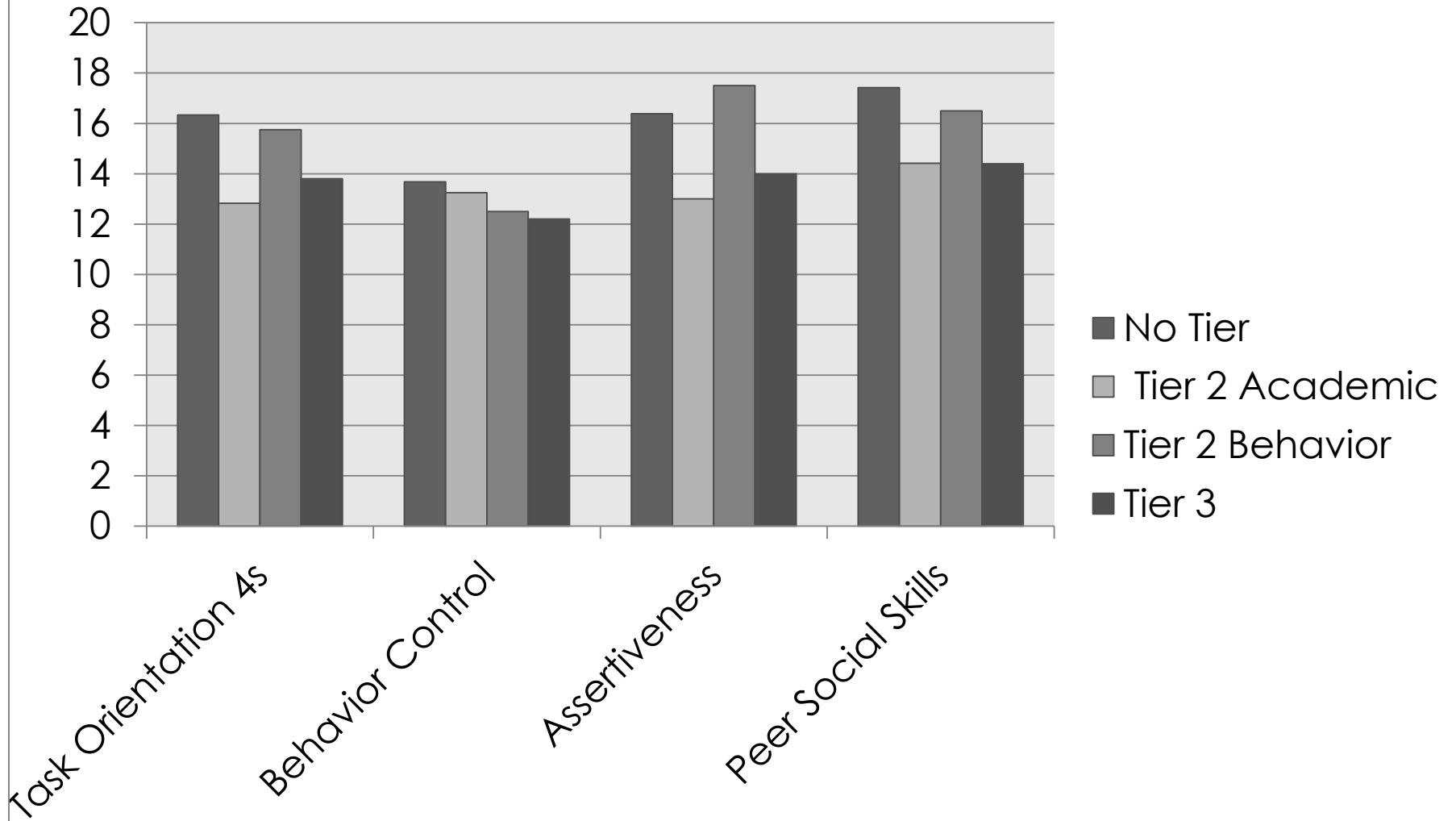
Effect Sizes for Foundational Academic By Tier



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Teacher-Child Rating Scale

Positive Domain Outcomes for Four-Year Olds



Evolving



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Why Every Child Ready?

5 Curricula

- Expensive
- Not aligned
- Weak content not aligned with standards

Child Assessment

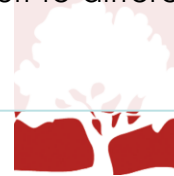
- Provide information on general skills, but not on whether children learn classroom content
- Limited by field

Teacher Assessment

- Limited by tools in the field
- Difficult for teachers to translate results into practice

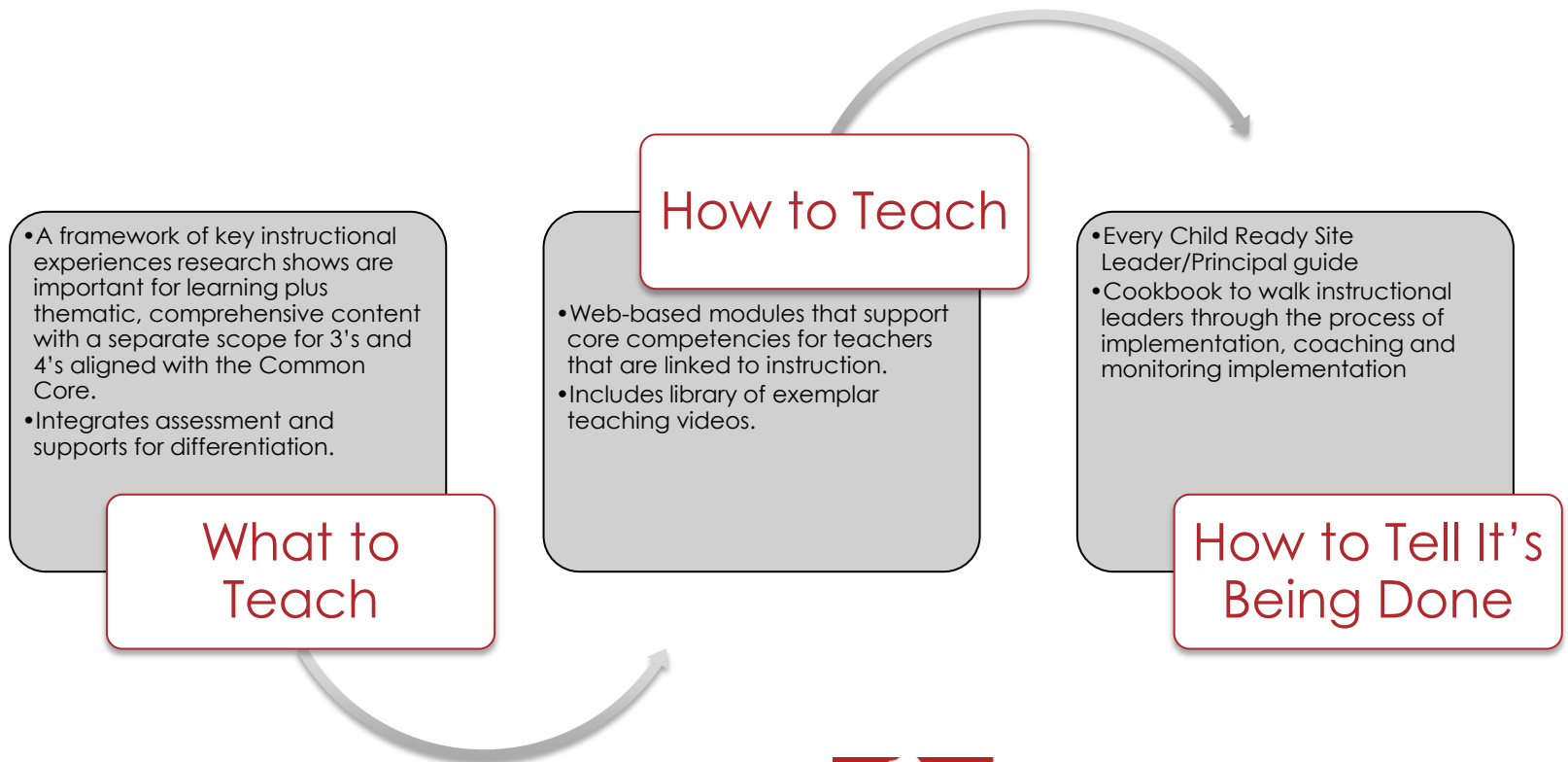
Professional Development

- Repeats much of same content annually; difficult to differentiate for teacher need
- Once delivered, content is lost
- Divorced from school leadership



Domain	Screener (baseline)	Progress Monitor	CBA
Vocabulary	PPVT, EVT, TOPEL	IGDI –one minute picture-naming task	Project-developed direct
Alphabet Knowledge	PALS LS, Letter ID/ Sounds	PALS LS, Letter ID	Project-developed direct
Print Knowledge	TOPEL, PALS Name Writing	Project-developed direct, PALS Name Writing	Project-developed direct
Phonological Awareness	TOPEL	Project-developed direct	Project-developed direct
Social Emotional	Teacher Child Rating Scale; Project-developed direct	Project-developed observation	Project-developed direct
Math	TEMA	Project developed direct	Project-developed direct

Every Child Ready



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Define Lesson Attributes

Lesson Attributes	Minimum Frequency	Included?
Advanced Organizer	1 explicit	
Target Vocabulary	4 core/4 supplemental	
Open-ended questions	2 embedded	
Knowledge or recall questions	2 embedded	
Think aloud	2 embedded	

The teacher signed the letters as she read them to the students



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Define Progression of Experiences

Unit Attributes	Nonfiction Text	Fiction Text
Reading One:	Advanced Organizer Explicitly introduce target vocabulary Introduce main idea	Advanced Organizer Explicitly introduce target vocabulary Introduce characters and setting
Reading Two:	Movement Shared Writing Interactive Dialogue	Movement Shared Writing Interactive Dialogue
Reading Three:	Shared Writing Interactive Dialogue	Phonological/Phonemic Awareness Interactive Dialogue
Reading Four:	Experimenting using the text Movement Interactive Dialogue	Readers' Theater Movement Interactive Dialogue



Provide Supports for Replication

Advanced organizers should focus on core goal of story reading (identified standard and behavioral objective). Students should know (a) what they will learn and (b) what you expect them to do that will demonstrate learning.

Vocabulary words - Choose a combination of verbs, adjectives, and nouns. Whenever meaningful and plausible, picture cards, demonstration opportunities and/or realia should be integrated with vocabulary word instruction for target and supplemental words (Coyne, Simmons, Kame'enui, & Stoolmiller, 2004; Silverman, 2007).

- **Target words** should be words that students need to gain meaning from the text. They should have a connected reference picture/page from the book that teachers can refer to during read aloud and non read-aloud activities.
 - Words written out for students to preview prior to first reading during advanced organizer;
 - Student friendly definitions given first time word appears in text;
 - students repeat words after definition provided;
 - Students rephrase definitions at end of story (teacher dictation beside words previewed before story reading)
- **Supplemental words** should be words students are more likely to encounter often in their future academic experiences.



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Things to Consider

Sufficient program structures – time,
mission, classroom resources

Capacity at Tier 1

Teacher and administrative
understanding and buy-in

Process documentation and
communication



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