Response to Intervention: RTI

─Sharon Vaughn─

NCLB, RF, & IDEA 2004

- Conformity of language across the three pieces of legislation
- Commonalities in definitions and expectations for reading instruction

Three primary commonalities

NCLB, RF and IDEA 2004 all require:

- The identification and implementation of instructional practices and programs grounded in scientifically based research (SBR)

- Early and preventive interventions

- Highly qualified teachers and high quality preservice preparation and professional development

What is scientifically based research?

SBR is "… research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs."

No Child Left Behind Act of 2001

What is SBR? (cont'd)

- Provides reliable evidence that the program or instructional practice is effective in improving reading outcomes

- Strengthens the causal link between the intervention and outcome by eliminating confounding variables or alternate explanations of the effect

- Has led to the identification of the five components of effective reading instruction

Terms used

- IDEA 2004: Peer reviewed research based special education and related practices
- RF: Effective reading programs based on scientifically based research
- NCLB: Educational programs and practices that have been proven effective through rigorous scientific research

Early and preventive intervention

- IDEA 2004:
  - Evaluating whether a child has a specific learning disability may be determined by the child's response to scientific, research-based intervention
  - "...early intervening services to reduce the need to label children as disabled in order to address the learning and behavioral needs of such children..." *(IDEA 2004)*

- RF: Providing targeted, intensive and supportive interventions for students identified as at risk for reading difficulties

Background of RTI

1975

- Students with disabilities guaranteed the opportunity to attend school and profit from education (P.L. 94-142)

1977

- Students with LD guaranteed special education services

What is Special about Treatment for Students with LD?

- Neurological disorder models
- Modality-matched instruction
- Multi-Sensory teaching
- Academic Instruction

Academic Instruction

Effective instruction is:

- Closely related to area of instructional need (e.g., reading, spelling, math)
- Well-specified
- Explicit
- Carefully designed

Summary

- Initially, neurological disorder models and psycholinguistic training
- Recently, more emphasis on interventions corresponding to academic needs of student
  - Considerable overall effects on instructional outcomes for students with LD
  - Still more to learn - students who have not successfully responded to treatments

What about Prevention?

Public Health Prevention Model
- Initiated in late nineteenth century by reformers concerned that poor health caused poverty leading to unneeded public expenses and demoralization of the poor

(Beaglehole & Bonita, 1997)

Public Health Approach

1. Define the health problem
2. Identify the risk factors associated with the problem
3. Develop and test interventions to control or prevent the cause of the problem
4. Implement interventions to improve the health of the population
5. Monitor those interventions to assess their effectiveness

(Schneider, 2000)

Levels of Intervention in Public Health Model

- Primary Intervention
  - Implemented to avoid or prevent occurrence of illness/injury by preventing exposure to risk factors
- Secondary Intervention
  - Implemented to minimize severity of illness/injury once risk or illness is identified
- Tertiary Intervention
  - Implemented to minimize disability by providing medical care and rehabilitation services
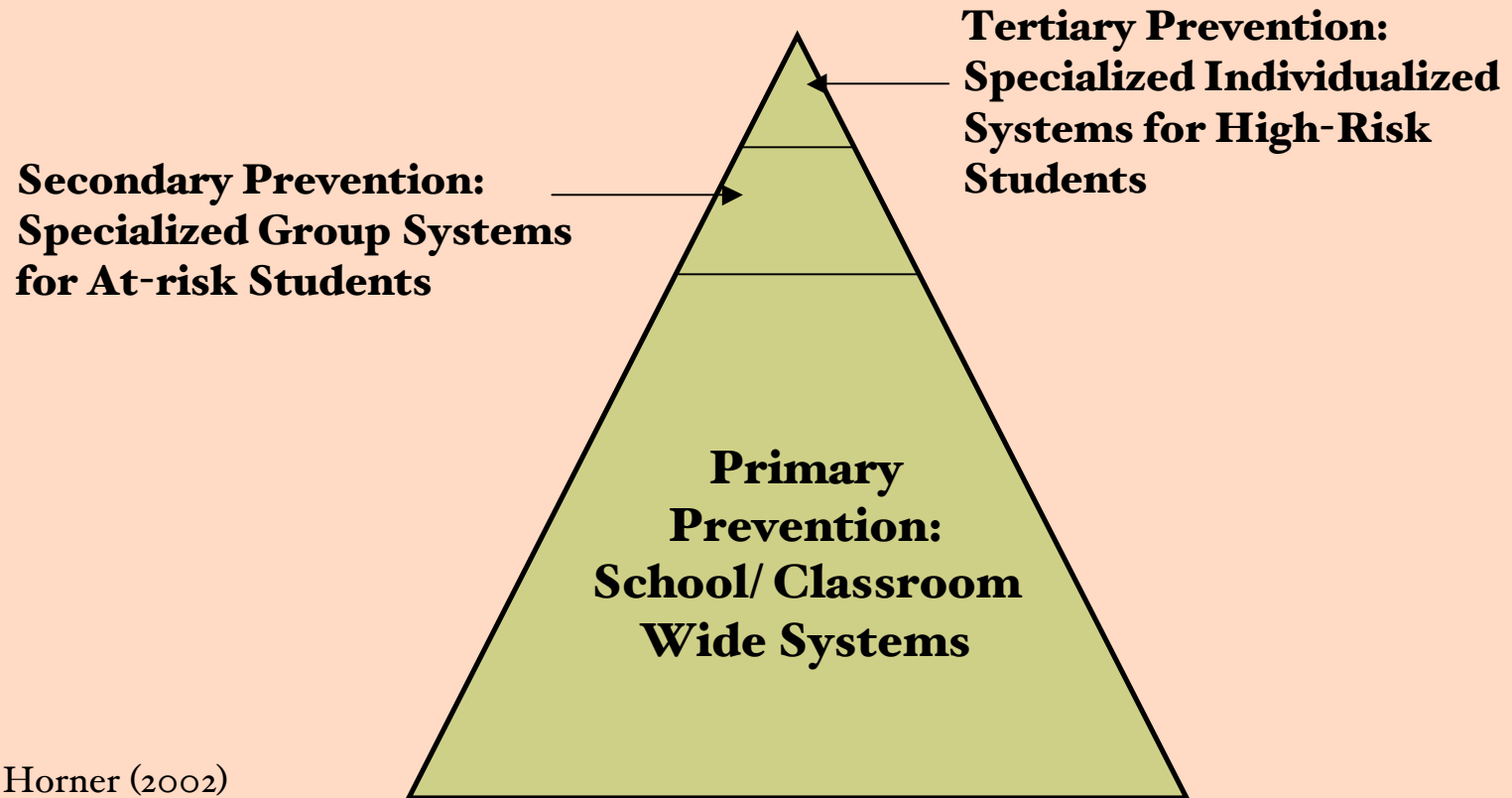
(Schneider, 2000)

Public Health Model Applied to Education

Multi-tiered Instruction

- Incorporates prevention and intervention
- Includes ongoing screening and progress monitoring to identify student needs for designing instruction and assess effectiveness of interventions
- Implement effective practices class-wide in general education (primary intervention)
- Provide successive levels of support to students as needed (secondary/tertiary intervention)

Example: 3-Tiers for Reading and Behavior

3-Levels of Support

Tertiary Prevention: Specialized Individualized Systems for High-Risk Students

Secondary Prevention: Specialized Group Systems for At-risk Students

Primary Prevention: School/ Classroom Wide Systems

Sugai & Horner (2002)

Why are leveled or tiered models used for academic interventions?

- Allow for use of a range of programs
- Allow for integration of services (e.g., Title I, general education, special education)
- Allow for practices related to Response to Intervention

What is Response to Intervention?

- RTI as an approach to LD identification was proposed in a National Research Council report (Heller, Holtzman, & Messick, 1982)
  - Recently supported by national organization on LD groups including IRA, NASP, DLD
  - NASDSE defined RTI as "the practice of (1) providing high quality instruction/intervention matched to students needs and (2) using learning rate over time and level of performance to (3) make important educational decisions (2005, p.5)
  - NASDE recommends a multi-tier system across educational system

National Joint Committee on LD Report on RTI

Use of 3-tiered model

Tier 1: High quality instructional and behavioral supports

Tier 2: Specialized intervention for students behind peers

Tier 3: Comprehensive evaluation and specialized services with intensive intervention

NJCLD (2005)

Primary: Core Class Instruction

Focus	For all students
Program	Scientific-based reading instruction and curriculum emphasizing the five critical elements of beginning reading
Grouping	Flexible grouping
Time	90 minutes or more per day
Assessment	Screening assessment at beginning, middle, and end of the academic year
Interventionist	General education teacher
Setting	General education classroom

Advantages of Multi-tiered Approaches

- Serves students who require little intervention as well as students who require long term intervention
- Informs instructional needs for special education decisions
- Matches level of support to student need
- Allows for exit from special education when appropriate based on ongoing measurement of progress and response to intervention

Advantages of Multi-tiered Approaches

"Whereas many typically achieving students can make up for lost time, learn well independently, and make up for mistakes made by educators, special education students cannot. The influence of research and evidence on decision making has even greater value for those students with disabilities who most require precision in their instructional and behavioral plans." (Vaughn & Dammann, 2001, p.27)

Why Use the 3-Tier Reading Model?

- The 3-Tier Reading Model provides **intensive early intervention for students most at-risk for reading difficulty,** and therefore holds promise **for reducing overall reading problems.**

The 3-Tier Reading Model emphasizes:

- ■ early identification of students in need of help

- ■ supplemental instruction to prevent or alleviate reading difficulties

- ■ serving students who require occasional additional instruction as well as students who require long-term support

- ■ assessing students on an ongoing basis, throughout the year

- ■ providing an avenue of supplemental instruction for students who do not require special education services but who consistently fall behind

Tier I: Core Class Instruction

Tier I is comprised of **three** elements:

(a) core reading program

(b) benchmark testing of students to determine instructional needs at least three times per year

(c) ongoing professional development

The Role of Progress Monitoring

- Progress monitoring is the feature of instruction that allows interventionists **to determine if students are on track** and **making adequate progress in their classroom**.

  In the Three-Tier Reading Model we refer to **two** types of progress monitoring:

  - **benchmark assessments** administered three times per year to all students
  - **frequent (twice per month) progress monitoring** to track progress and inform instructional decision-making during the course of Tier II or Tier III instruction.
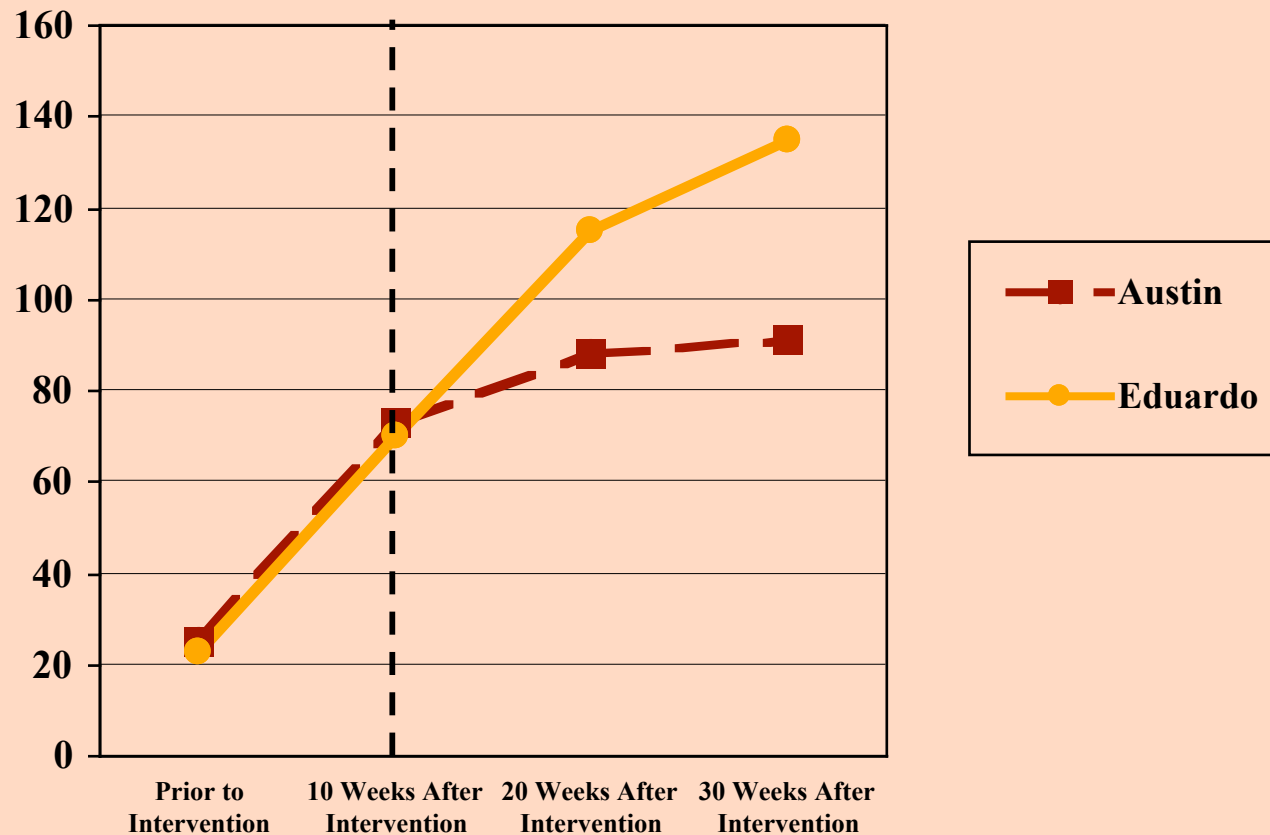
The Role of Progress Monitoring (Cont.)

- **Benchmark assessments** aid in early identification of students at-risk for reading problems. Testing of all students, kindergarten through third grade, is conducted in early fall, early winter, and late spring.

- **Frequent progress monitoring** of students receiving Tier II and Tier III instruction is an essential component of the model. Teachers' instruction improves when they use progress monitoring to (a) track student learning, (b) plan instruction, and (c) provide feedback to students.

Means for TORF: Fluency
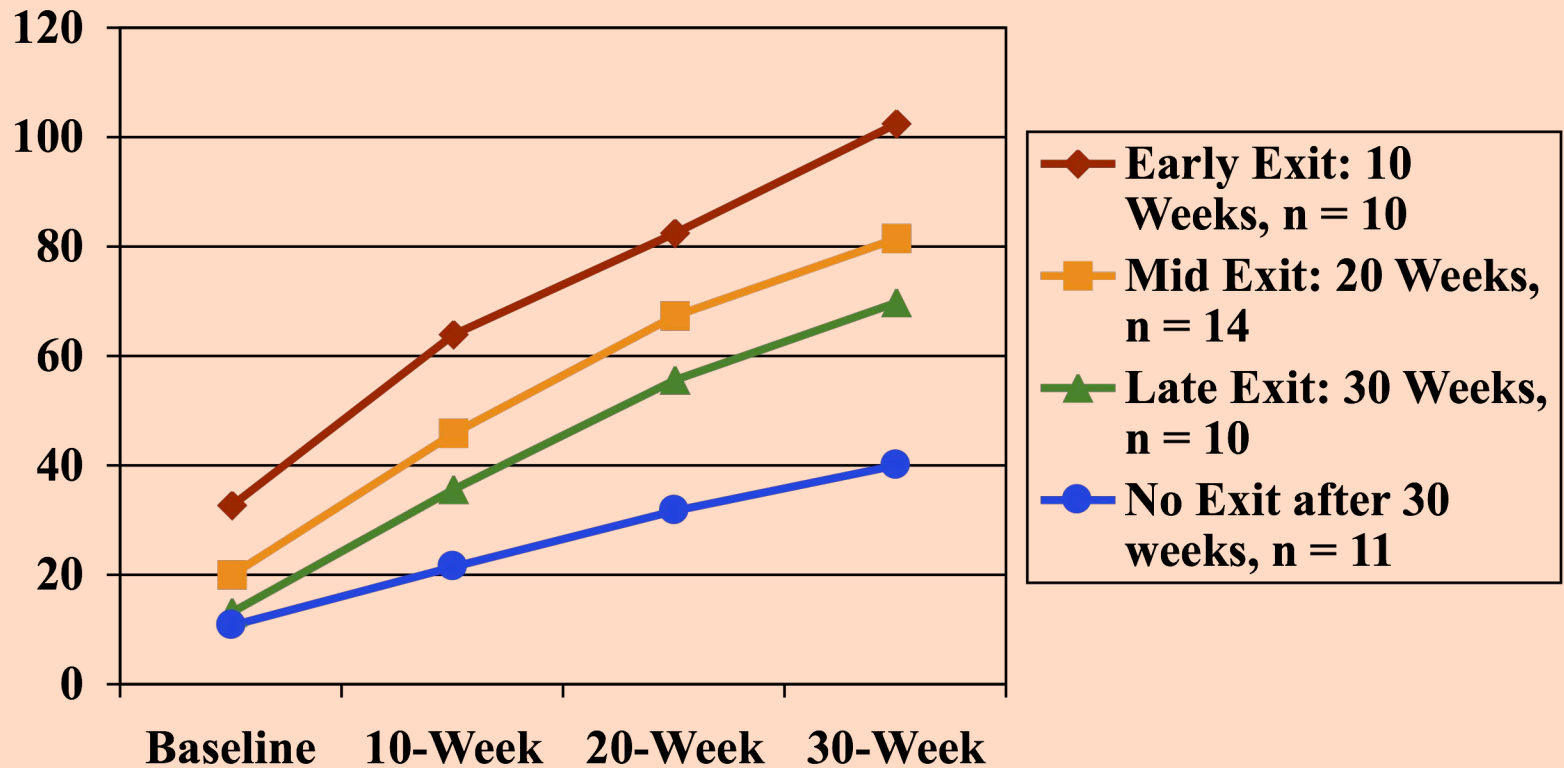
Austin's and Eduardo's progress on the 2nd grade passages of the TORF over time (exited after 10 weeks of supplemental instruction).


Legend:
- Austin
- Eduardo

X-axis: Prior to Intervention, 10 Weeks After Intervention, 20 Weeks After Intervention, 30 Weeks After Intervention

Y-axis: 0 to 160

Note: Dotted vertical line is where each student met exit criteria and supplemental reading instruction was terminated.

Armando's and Patricia's progress on the 2nd grade passages of the TORF over time (exited after 20 weeks of supplemental instruction).
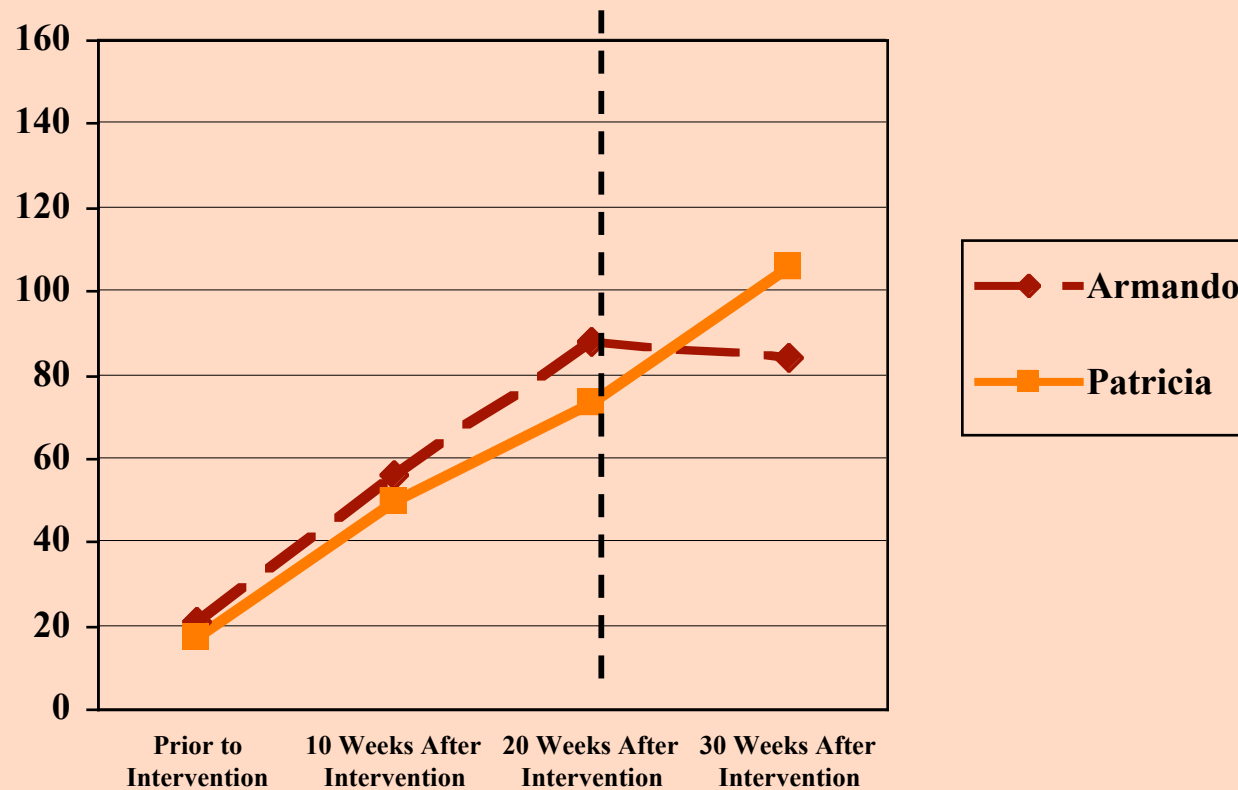
Note: Dotted vertical line is where each student met exit criteria and supplemental reading instruction was terminated.

Comparison between two students who failed to thrive in the classroom and those who thrived.
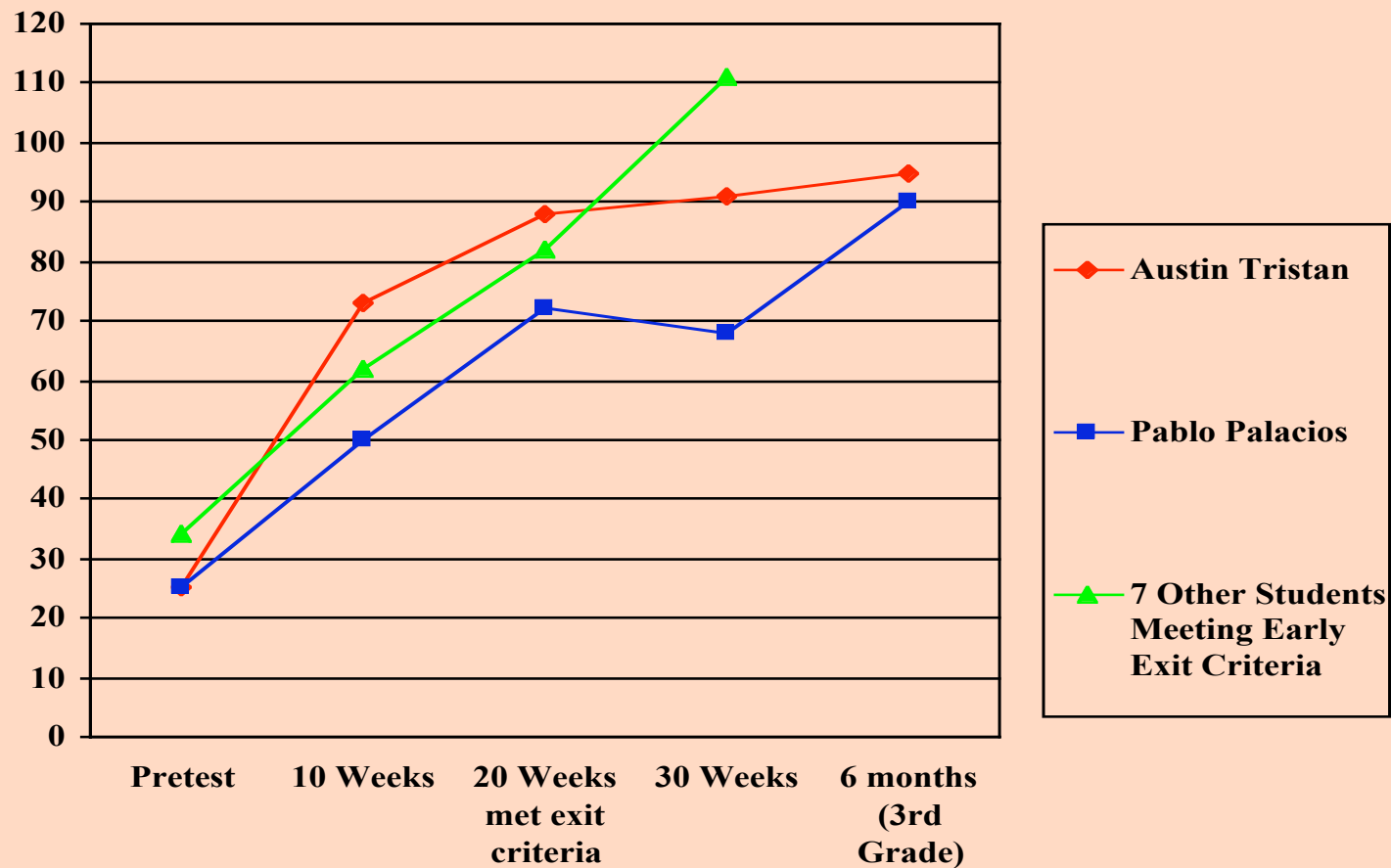
General Findings

- **More girls than boys were identified as not meeting exit criteria, 4 boys; 7 girls.**

- **23 out of 24 students maintained or improved fluency scores after exit.**

- **However, only 16 of 24 met criteria for "thriving" without intervention (thrive = 1 word or greater per week in fluency).**

- **All 4 groups made greatest gains in fluency the 1st 10 weeks.**

How did students do by gender?

- **Exited after 10 weeks**
- **- 6 males; 4 females**
- **Exited after 20 weeks**
- **- 5 males; 9 females**
- **Exited after 30 weeks**
- **- 5 males; 5 females**
- **Did not meet exit criteria**
- **- 4 males; 7 females**

Key Ideas Linked to Improved Outcomes

- Explicit, well-organized instruction
- Frequent cumulative review of previously mastered content
- Self-regulation strategies, whereby students monitor their academic progress and set goals for their academic performance
- Peer mediation for extending instruction
- Focus on higher order processing

About The Spotlight 3-Tier/ Building RTI Capacity Project

- Partner with ESC RTI Liaisons to provide professional development and technical assistance to schools
- Develop and maintain a resource web site

Sources of Technical Assistance

National RTI Center

National Regional Comprehensive Centers Program

www.ed.gov/programs/newccp/index.html

OSERS Regional Resource Centers

www.ed.gov/parents/needs/speced/resources

Center on Instruction

www.centeroninstruction.org/

IDEA and Research for Inclusive Settings
www.iris.peabody.vanderbilt.edu/index.html

Sources of Technical Assistance

National Association of School Psychologists

www.nasponline.org/

National Assoc. of State Directors of Special Education

www.nasdse.org/

National Center for Student Progress Monitoring
www.studentprogress.org/

Texas LD Center

www.texasldcenter.org

About The Spotlight 3-Tier/ Building RTI Capacity Project

- Develop and disseminate resources to facilitate RTI implementation in Texas schools
- Partner with ESC RTI Liaisons to provide professional development and technical assistance to schools
- Develop and maintain a resource web site

Implementation of a 3-Tier Reading Model: The Process

- Use student data to group students and plan reading instruction
- Examine resources to provide intervention instruction
- Determine entry and exit criteria for providing intervention
- Plan appropriate professional development to meet teachers' needs based on data

Implementation of a 3-Tier Reading Model: The Process

- Implement effective core reading instruction and intervention

- Develop and implement a Campus Action Plan that includes grade-level goals, performance measures, action steps, and a timeline for review

- Review student and grade-level progress toward meeting campus goals

- Share the good news with teachers and parents

Challenges in Implementing RTI

1. Building teachers' knowledge and expertise in teaching the 5 components of SBRI
2. Establishing the critical relationship between of assessing students and delivering data-driven tailor-made intervention to at-risk students
3. Promoting an inquiry-based approach to intervention
4. Being a collaborative team member
5. Being a lifelong learner
6. Recognizing the opportunities that change brings

For More Informatiom

http://rt3home.texasreading.org/ 3tier

This web site will evolve into one that provides information about implementation of response to intervention in Texas schools:

http://buildingRTI.utexas.org