Spectrum K12

Dr. Andrea Ogonosky

Data Collection and Interpretation in an RTI Problem Solving Process: Developing a Successful RtI Approach to Student Achievement

spectrum K12 SCHOOL SOLUTIONS
Move Every Child Forward™

February 16th , 2011

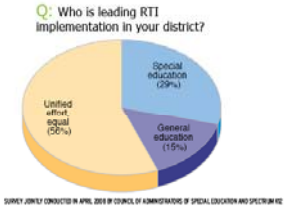
Spectrum K12

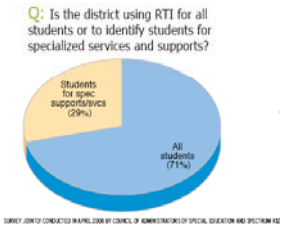
About Andrea Ogonosky

Andrea Ogonosky received her Ph.D. in School Psychology from Penn State University. She has practiced as a School Psychologist in Pennsylvania and Texas. Andrea is the author of The Response to Intervention Handbook- *Moving from Theory to Practice & Building Interventions in Grades 6-12*. She has authored several articles on curriculum based measurement, response to intervention, and working with struggling learners in the general education classroom. Andrea has been employed as Coordinator of Psychological and Diagnostic services in Humble ISD and as an Educational Consultant for Region IV Education Service Center. She has also taught a behavioral course at the University of Houston Clear Lake. Currently Andrea is an Educational Consultant providing a variety of assessment and consultative services to school districts across the state ranging from implementing response to intervention, completing academic and behavioral assessments, supervision of LSSP's, and providing training to general and special education staff in the areas of curriculum based measurement, response to intervention, ADHD, LD assessment, emotional disturbance, autism, and behavior management. Andrea is a Past President of the Texas Association of School Psychologists.

Spectrum K12

Response to Intervention–Where?





Download from www.spectrumk12.com

Spectrum K12

Spectrum K12 Vision

Reinvent the classroom by delivering a dynamic **Student Achievement Management** system to enable personalized learning for every child

- Student-Centric Progress Monitoring
- Return on Intervention™
- Integrated Student Profile
- Personalized Intervention Plans
- Fidelity Assurance
- RTI Process Management

THE POWER OF ASSESSMENT! DEVELOPING A SUCCESSFUL RTI APPROACH TO STUDENT ACHIEVEMENT

Andrea Ogonosky, Ph.D.

6

Spectrum K12

Overview

- Data and problem solving
- Using universal screening and progress monitoring data to enhance instruction - Baseline, Rate of Improvement ,Aim line
- Avoiding the common errors and barriers in RTI implementation

7

Spectrum K12

Critical Components of RtI

- Problem Solving Framework:
  - Students receive high quality instruction in the general education setting
  - General education instruction is researched-based
  - General education instructors and staff assume an active role in student assessment

Spectrum K12

Problem Solving

Problem Solving

- Uses scientific method
- Data feedback loop
- Data-based decision making

- Eliminates bias
  - Takes subjectivity out of decisions
- Can be applied:
  - System vs. individual level
  - Regardless of "presenting problem"

9

Spectrum K12

Response to Intervention Team Process is a systematic support system for students.

- For prevention of academic failure.
- For intervention, providing struggling students with the targeted, strategic and intensive intervention they require.

10

Spectrum K12

District Level Policies

- District procedures on RtI
- Structure the intervention process
- Aligns student needs with district level program access
- Policies that define parent involvement
- Clarification of due process procedures for students

11

Spectrum K12

Problem-Solving Process

1. Identify and analyze the problem (including collection of baseline data)
2. Generate a hypotheses and possible intervention strategies
3. Implement an intervention plan with data collection
4. Analyze the data and reviewing/ revising interventions as needed

12

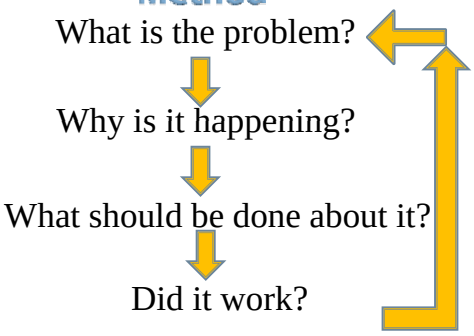
Spectrum K12

RTI Problem Solving

- Problem solving is not unusual in teaching, but for most teachers, *problem solving in response to student data consistently and with fidelity is a new approach to the team process.*
- The use of the data has the effect of "grounding" their discussions and helping to maintain a focus in problem solving.
- Moves away from "emotional decision making".

13

RtI Problem-Solving Method



14

Spectrum K12

Data Collection and Interpretation

- Use of Technology
- Commercial software programs
- Large districts integrate district-wide database and systems

Note: The data is only as good as it is used: collected, aggregated, interpreted and communicated.

15

Spectrum K12

Three Types of Assessments

- Screening
- Diagnostic (formative)
- Outcomes (summative)

Question: What data is your district currently using for problem solving? Are all staff aware of the expectations and understand when and how to interpret?

16

Spectrum K12

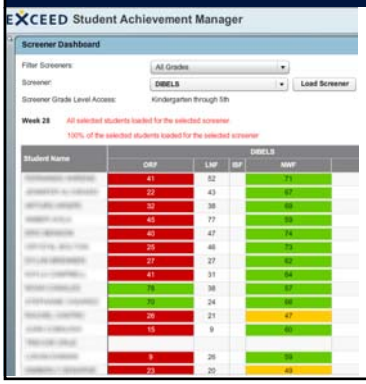
Critical Components of RTI

- Universal screening of all students
- Defining, in measurable terms, the problem area(s)
- Collecting baseline data prior to the start of interventions
- Establishing a written plan of intervention which includes detailing accountability
- Using progress monitoring (CBM)
- Comparing intervention data

17

Spectrum K12

Universal Screening



18

Spectrum K12

Universal Screening

- Development of Universal data norms
  - Classroom
  - Grade level
  - School
  - District
- Universal data taken three times per year
  - Fall
  - Winter
  - Spring

Spectrum K12

Universal Screening

- Data from screening must be available to teachers, principals, and district staff and shared with parents.
- Data must be "user friendly" in format.

Spectrum K12

Core Curriculum Support RtI

(Evaluate trends based upon Universal Screening data)

- Composition of Team for Problem Solving
  - Principal must lead
  - Staff familiar with curriculum and standards
  - Someone who can analyze and understand data
  - Grade level teachers (by grade if necessary)

Spectrum K12

CBM = Improvement in RATE

Fluency and automaticity are measured by **rate** (how fast it can be performed). Rate increases gradually as proficiency develops - which means it is measured over time.

Improvement in rate is the measure of progress (slope of improvement or rate of improvement)

Spectrum K12

Applications of CBM data

- School-wide progress monitoring
- Identifying struggling learners (RTI)
- Evaluating classroom variables
- Increasing instructional effectiveness
- Contrasting different subgroups
- Evaluating strategic intervention effectiveness

23

Spectrum K12

Data: Progress Monitoring

How do we know our intervention is working?

- Data collected is a record of the assessment procedure needed for applying the decision rule:
  - Must record:
    - ➢how the monitoring is to be done
    - ➢By whom is it going to be Done *and*
    - ➢The rules will be used to determine how to proceed with the selected intervention components

24

Spectrum K12

Review the Results

•Analyze, and reflect upon results
•Data outcomes of the interventions is critical and the ultimate criteria of success :
  •Team problem solving
  •Student academic growth

25

Spectrum K12

Analyze the Results

- Elements necessary to determine effectiveness:
  - Team considers the available monitoring data relative to the goal to determine the rate of growth.
  - Team records the effects of intervention as measured
  - Team uses decision points: to continue, change, stop or make other decisions relative to the intervention and results.

Keep all decisions focused on the data!

26

Spectrum K12

Analyze the Results

- Elements necessary to determine effectiveness:
  - Team makes decisions to continue, change, stop or make other decisions relative to the intervention and results. All decisions are data-driven and guided by the needs of the student as well as the capacities and resources of the setting.

27

DATA COLLECTION AND INTERPRETATION

KEY FACTORS

28

Spectrum K12

Core Standards of Technical Adequacy

- Progress Monitoring Standards:
  - Sufficient number of alternate forms
  - Sensitivity to learning
  - Evidence of instructional utility
  - Specification of adequate growth
  - Description of benchmarks for adequate end-of-year performance or goal-setting process

29

Spectrum K12

Core Standards of Technical Adequacy

- Choosing Instrument
- Staff Development
- Standardization
- Use of Norms
- Decision Making
- Communication of Results

30

Spectrum K12

Reading CBM's

- Kindergarten
  - Letter Sound Fluency or Phoneme Segmentation Fluency
- Grade 1
  - Word Identification Fluency
- Grades 2-3
  - Passage Reading Fluency
- Grades 4-8
  - Maze Fluency
- Grade 9-10
- Content vocabulary

31

Spectrum K12

READING RATE = COMPREHENSION

- Reading connected text rapidly and accurately plays a crucial role in a student's ability to comprehend.

Rapid word recognition frees up cognitive resources for higher-level comprehension processes (Fuchs et al., 2001)

Spectrum K12

CBM Maze Fluency

- Grade Levels 2-8
- Group administration
- Students read passage and circle correct word for each blank
- Time is 2.5 minutes
- Tests graded at later time

33

Spectrum K12

Math CBM's

- Kindergarten and first grade:
  - Quantity Array
  - Number Identification
  - Quantity Discrimination
  - Missing Number
- Grades 1–8:
  - Computation
- Grades 2–9:
  - Concepts and Applications

34

OUTCOME GOALS

35

Spectrum K12

Select Data Decision Points

- Develop cut-scores
- Determine norms for comparison
- Discuss Slope of Improvement (RtI response slope)

36

Spectrum K12

Charting Results

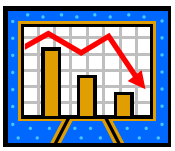
- Set up progress-monitoring graph
- Label academic behavior being measured on vertical axis (e.g., correct wpm) and numbers
- Choose number of instruction weeks for graphing and label and list on horizontal axis

37

Spectrum K12

Charting Baseline Data

- Chart data-points from 3 initial probes
- Graph median score



38

Spectrum K12

Charting an Aimline

- Place calculated performance goal on CBM chart
  - Mark goal with 'X' on last instructional week of monitoring
- Draw line connecting baseline (median score) to performance goal (objective)

39

DECISION RULES/ INTERPRETATION

40

Spectrum K12

Evaluating Progress: Informal Indicators

- Degree of change in "level" of data-points
- Variability of data-points
- Overlap of data-points

41

Spectrum K12

Decide on a Data Decision Rule

A decision rule is the systematic procedure by which patterns of data are analyzed. This data analysis assists in making a decision about the effectiveness of an intervention.

42

Spectrum K12

Rules for Making Decisions

Option I: 3 Data Point

- Decision is made when 3 *consecutive data points fall* above or below the aimline (must have minimum 6 pts).

Option II: Trend Line Analysis

- Decision is made after 9 data points which results in a *trendline* to compare to the *aimline*.

43

Spectrum K12

Things to Consider in Choosing a Decision Rule

- Focus on the question: "will the student reach his/her goal by the end of the goal period?"
- Decide to change an intervention whenever the rate of progress falls below the expectation.
- Think of changes in instruction as fine tuning rather than major reconstruction of lessons.

44

Spectrum K12

Evaluating Progress: Formal Indicators

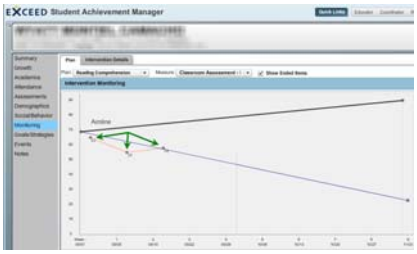
- 3 data-point decision-rule
  - If student's score falls below or above plotted aim-line in 3 consecutive measurements, change instructional intervention

3 data points above line, adjust aim-line upward or change material to higher level

Spectrum K12

3 Data-Point Decision Rule

- 3 consecutive points <u>below</u> aim-line, change intervention to boost learning



Spectrum K12

3 Data-Point Decision Rule

- If 3 consecutive data points <u>around</u> aim-line, no changes made

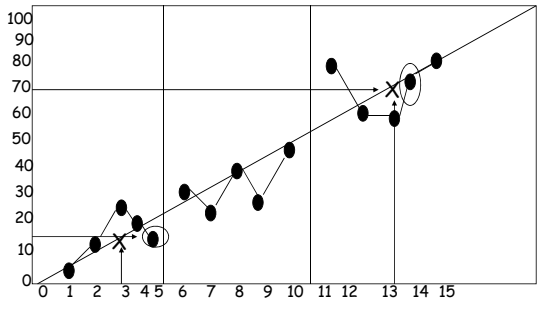
Spectrum K12

Tukey Method

- Graphed scores are divided into 3 fairly equal groups
- Two vertical lines drawn between groups
- In the 1st and 3rd groups:
  - Find median data point
  - Mark with "X"
  - Draw a line between 1st and 3rd group "X" (known as the trend line)

Spectrum K12

Tukey Method of Plotting a Trend Line



Spectrum K12

Common Errors

- ✓ Focusing on administering and collecting Assessment data rather than using the data to inform instruction
- ✓ Confusing awareness training with "how to" training
- ✓ Underestimating the magnitude of change
- ✓ Taking on too much at initial scale-up
- ✓ Beginning without a district plan
- ✓ Failure to view Rit as a system-wide Change

50

Spectrum K12

Issues and Perceived Barriers

- Disparate knowledge and skills
- Lack of clarity about characteristics of the problem solving process
- Limited fidelity of assessment practices
- Gaps in leadership's ability to make change (reciprocal accountability)

51

Spectrum K12

Issues and Perceived Barriers

- Conflicting beliefs and values
- Misaligned policies
- Insufficient funding
- Limited family involvement

52

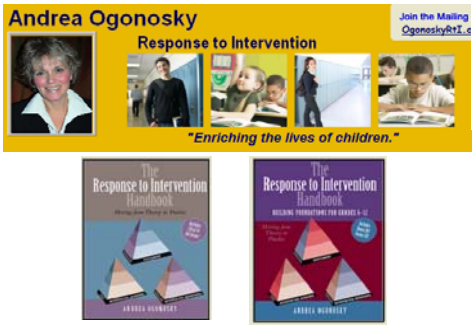
Spectrum K12

Questions?

53

Spectrum K12

Website Dr. Ogonosky



http://www.ogonoskyrti.com/index.html

Spectrum K12

SK12 Resources

- Spectrum K12/CASE Response to Intervention Survey
- SK12 Blog
- EXCEED RTI
- Upcoming Webinars
- Full webinar description
- **Pre-School RTI: Closing the Achievement Gap Before Kindergarten**
- Presented by AppleTree Institute for Education Innovation

  Director of Education, Mary Anne Lesiak, Director Early Reading First Project, Lydia Carlis, & Education Coach, Kelly Trygstad

  Wednesday, February 23, 11:00 am EST

Spectrum K12

Thank You!

Contact Information

Machele Stefhon
mstefhon@spectrumk12.com
864.421.4105

www.specrumk12.com

spectrum K12
SCHOOL SOLUTIONS
Move Every Child Forward™

Spectrum K12

EXCEED Student Achievement Manager

Spectrum K12

District Management Systems

Business Management System	Student Data Management System	Instructional Management System
• HR • Finance • Transportation • Food Services • Procure/Supply	• SIS • Attendance • Grade Reporting • Scheduling • Special Education Management System	• Assessment • Curriculum Management • Learning Management • Library Management

Source: Eduventures

Spectrum K12

EXCEED

Student Achievement Management, (SAM)

Student Achievement Management System

Integrated Student Profile
Program Management
(SPED, 504, Intervention, Dropout Prevention, Graduation Planning)
Plan Entry/Management

Progress Monitoring
Process/Event Management
Workflow/Tasks
Reporting
Analysis & Visualization


Carla Jones, Classroom Teacher


Judy Sloan, RTI Program Manager


Vern Rogers, District Admin

Student Data Management

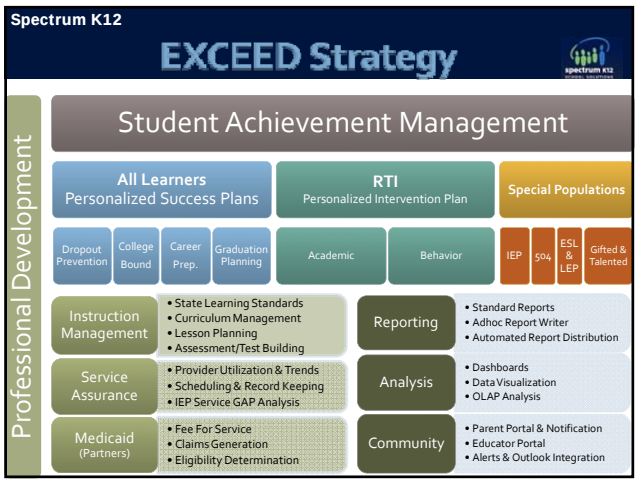
Instructional Management

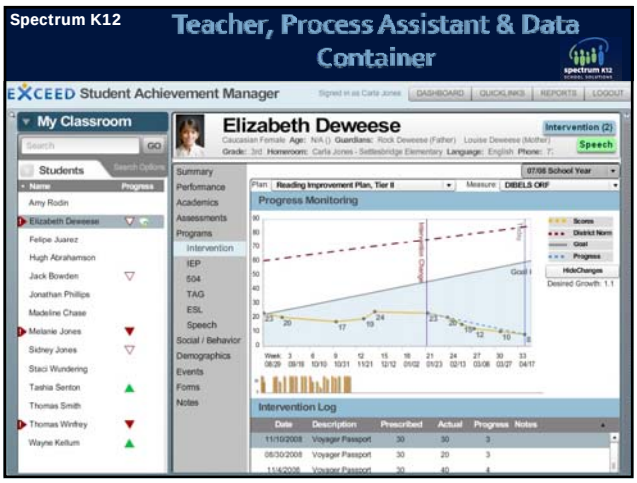
Student-Centric Integration of Academic and Administrative Data to Deliver Personalized Instructional Strategies

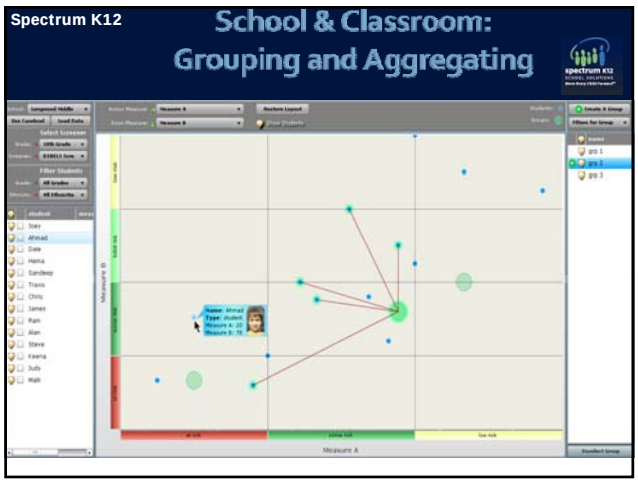
Spectrum K12

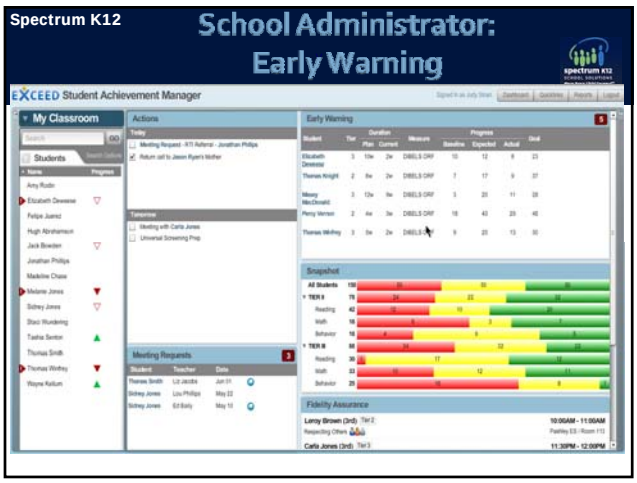
EXCEED

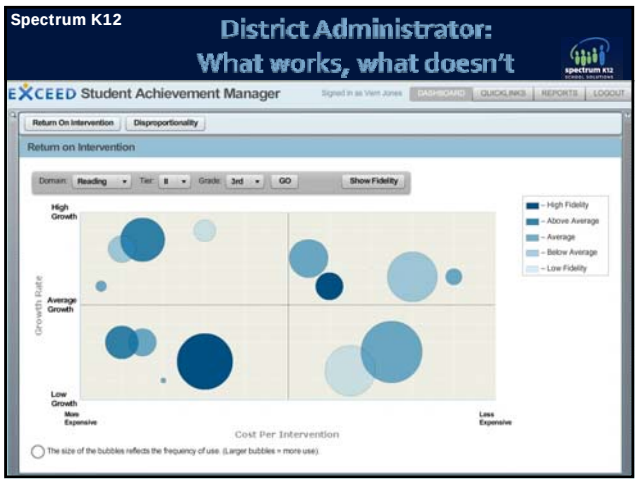
- ...is an integrated, student-centric student achievement management platform allowing teachers to drive day-to-day activities, research based interventions and outcomes to help all students achieve success.
- ...monitors academic and behavioral progress, displays efficacy and fidelity, and surfaces achievement gaps at the student, class, grade, group or district level.

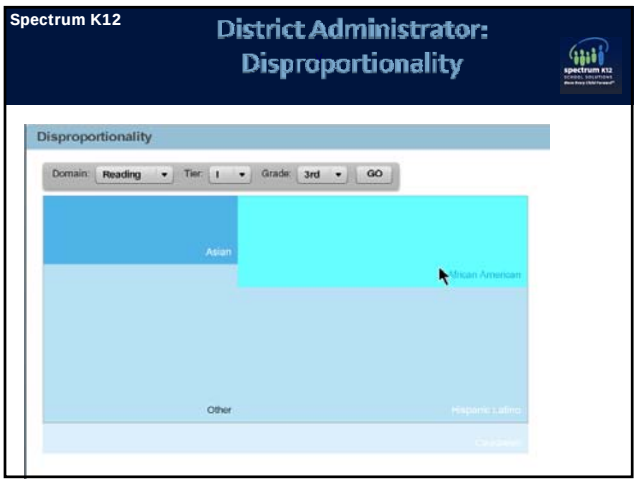

Spectrum K12
EXCEED Strategy
Professional Development
Student Achievement Management
All Learners
Personalized Success Plans
RTI
Personalized Intervention Plan
Special Populations
Dropout Prevention
College Bound
Career Prep.
Graduation Planning
Academic
Behavior
IEP
504
ESL & LEP
Gifted & Talented
Instruction Management
• State Learning Standards
• Curriculum Management
• Lesson Planning
• Assessment/Test Building
Reporting
• Standard Reports
• Adhoc Report Writer
• Automated Report Distribution
Service Assurance
• Provider Utilization & Trends
• Scheduling & Record Keeping
• IEP Service GAP Analysis
Analysis
• Dashboards
• Data Visualization
• OLAP Analysis
Medicaid (Partners)
• Fee For Service
• Claims Generation
• Eligibility Determination
Community
• Parent Portal & Notification
• Educator Portal
• Alerts & Outlook Integration


Spectrum K12
Teacher, Process Assistant & Data Container
EXCEED Student Achievement Manager
My Classroom
Elizabeth Deweese
Progress Monitoring
Intervention Log


Spectrum K12
School & Classroom:
Grouping and Aggregating


Spectrum K12
School Administrator:
Early Warning
EXCEED Student Achievement Manager
My Classroom
Early Warning
Snapshot
Meeting Requests
Fidelity Assurance


Spectrum K12
District Administrator:
What works, what doesn't
EXCEED Student Achievement Manager
Return On Intervention
Disproportionality
Return on Intervention
Domain: Reading
Tier: II
Grade: 3rd
GO
Show Fidelity
High Growth
Average Growth
Low Growth
Growth Rate
More Expensive
Less Expensive
Cost Per Intervention
High Fidelity
Above Average
Average
Below Average
Low Fidelity
The size of the bubbles reflects the frequency of use. (Larger bubbles = more use).


Spectrum K12
District Administrator:
Disproportionality
Disproportionality
Domain: Reading
Tier: I
Grade: 3rd
GO
Asian
Other