

Problem-Solving and Response-to-Intervention: School Psychologists' Beliefs, Practices, and Training Needs

NASP Annual Convention 2006

Larry Porter

George Batsche

Jose Castillo

Rachel Witte

University of South Florida

Are we ready for this?

- The skills of school psychologists will be critical if Problem-Solving/Rtl is to be implemented successfully.
- Prior to the statewide implementation of PSM/Rtl, existing skills and who possessed them had to be assessed.
- The GAP between needed and existing skills must be closed if we are to be successful.

Statewide Problem-Solving (PS) System Initiative

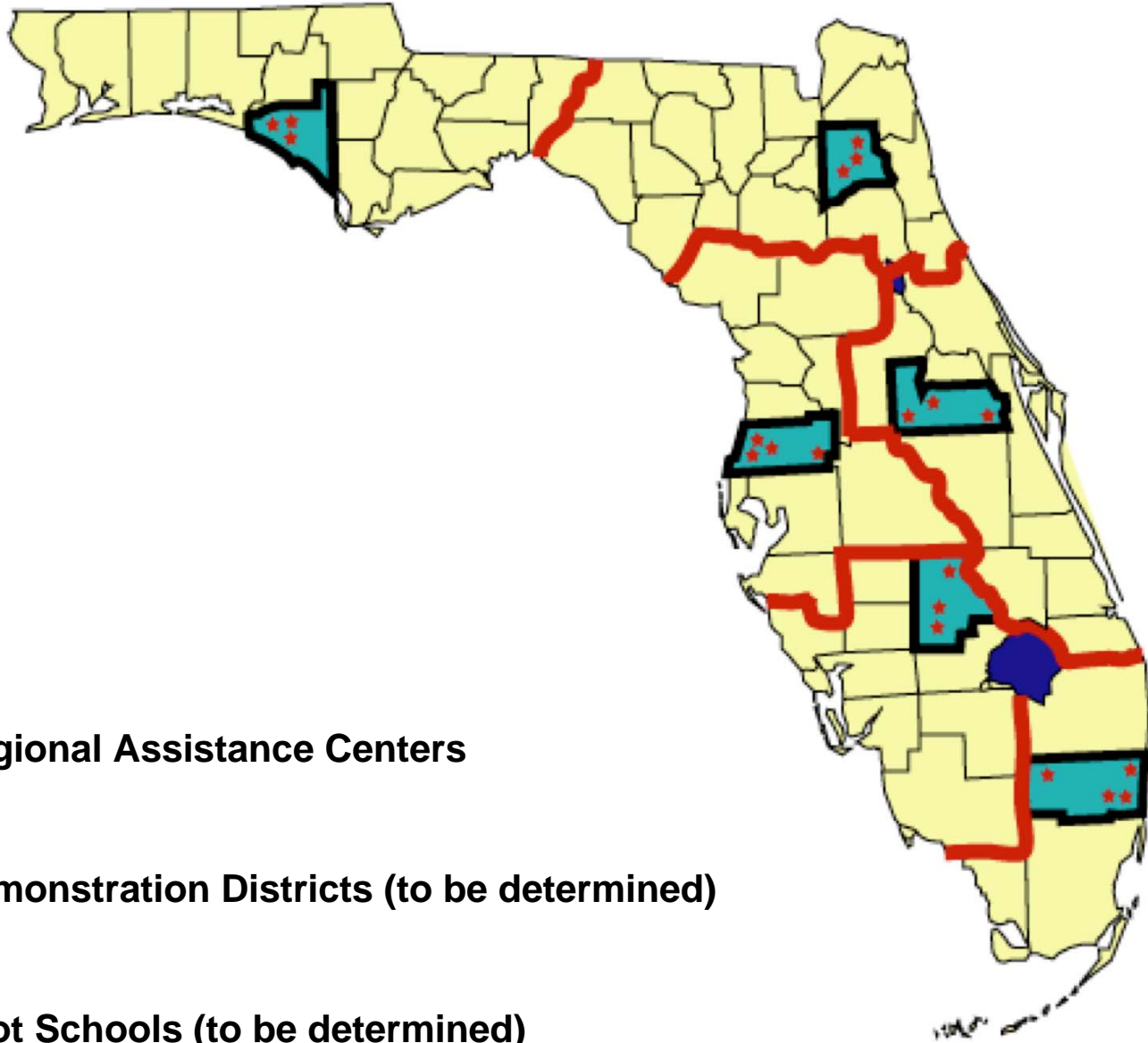
- Foundation Structures:
 - The Problem-Solving Process
 - Assessment/Progress Monitoring
 - CBM/DIBELS
 - Intervention Support
 - Program Evaluation and Accountability
 - Organizational Development and Systems Support

Implementation: Critical Components

- Integrate with existing initiatives
 - PBS
 - Reading First
 - Early Intervention
- Efficient Training
 - Problem-Solving Method
 - Data Collection and Interpretation
 - CBM, DIBELS, PBS, Local Initiatives
 - Evidence-based Interventions
 - PBS, Reading First
 - Response to Intervention
 - Use of technology


Critical Components, cont.

- Technical Assistance
 - State and Regional Levels
 - District Personnel (Student Services et al)
 - Technology
- Coaching Model
 - Building Level
- Strong Project Evaluation Model
- Statewide Training
 - Regional Training Facilitators
- Demonstration Districts
- Schools within Districts



 Regional Assistance Centers

 Demonstration Districts (to be determined)

 Pilot Schools (to be determined)

Project Structure

- Regional Assistance Centers
 - Training
 - Technology
 - Intervention Resources (EBIs)
 - Regional Trainers
- Demonstration Districts
- Pilot Buildings within Districts

Research on Integrity of Problem-Solving (Flugum and Reschly, 1994)

- Use of Behavioral Definition
 - 41% of Teachers/45% of Related Services
- Use of Direct Measure/Baseline
 - 38% of Teachers/27% of Related Services
- Use of Step-by-Step Intervention Plan
 - 53% of Teachers/44% of Related Services
- Graphing Results
 - 7% of Teachers/2% of Related Services
- Compare Results to Baseline
 - 14% of Teachers/11% of Related Services

Problem-Solving (PS)/Response-to-Intervention (RtI) Survey: Introduction

- Rationale: Few studies investigating school psychologists' views of PS/RtI
- Purpose:
 - Explore the beliefs, practices and training needs of school psychologists
 - Determine readiness for PS/RtI
 - Training needs assessment

PS/Rtl Survey: Structure

- Questions related to:
 - Demographic Information
 - Current practices (Problem ID, Problem Analysis, Intervention, Progress Monitoring)
 - Training needs
 - Beliefs
- Planned sequence of questions
 - Prevent responses to practice and training need items based upon the responses to the belief items.

PS/Rtl Survey: Structure

- Beliefs about PS/Rtl
 - Lickert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)
- Training Needs
 - Lickert scale (Highest Priority, High Priority Low Priority, Lowest Priority)
- Practices
 - Lickert scale (Never, Sometimes, Often, Always).

PS/RtI Survey: Method

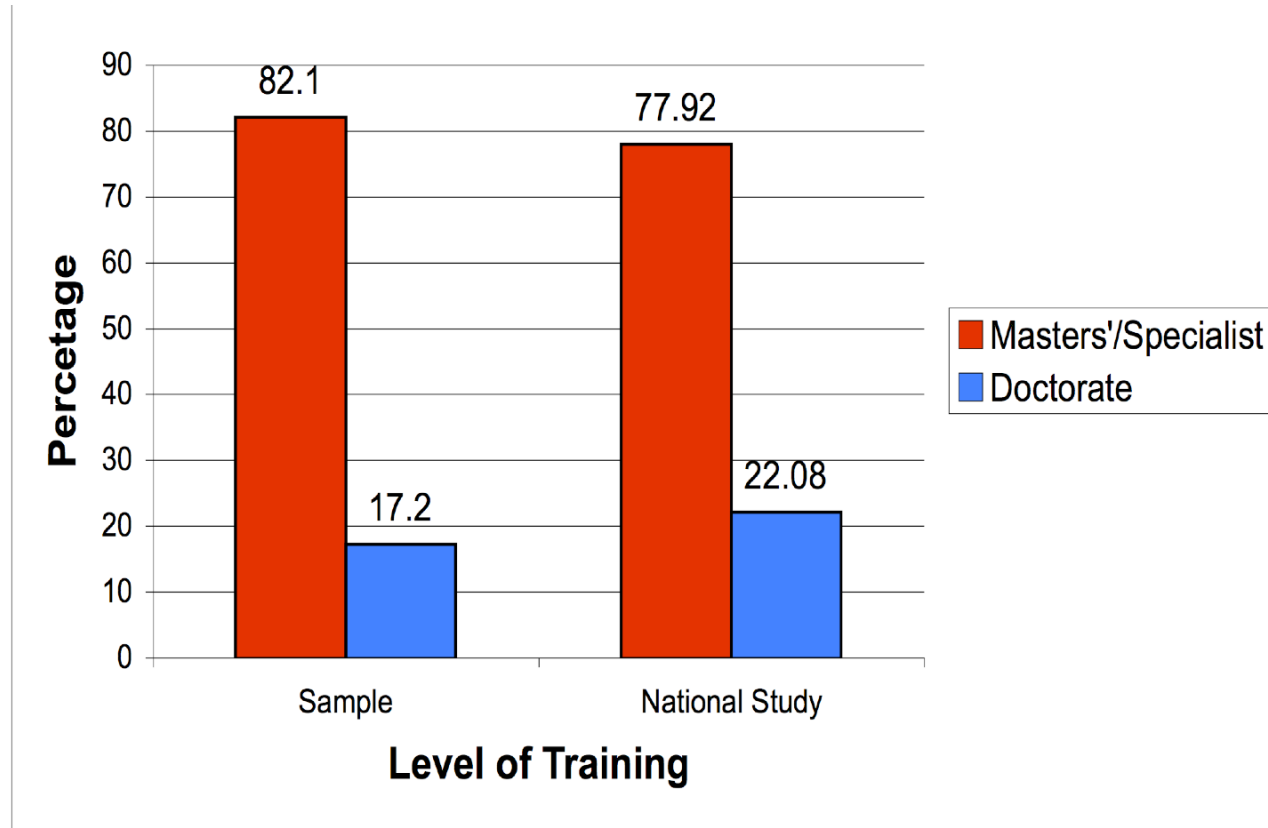
- Total number of surveys mailed: 823
- Sample: School psychologists, members of a state association for school psychology
- Total number of responses: 308
- Response rate: 42%
- Data were transferred to SPSS for analyses.
- 20% of transferred data were checked for data entry error.
- % agreement: 99%

PS/Rtl Survey: Sample

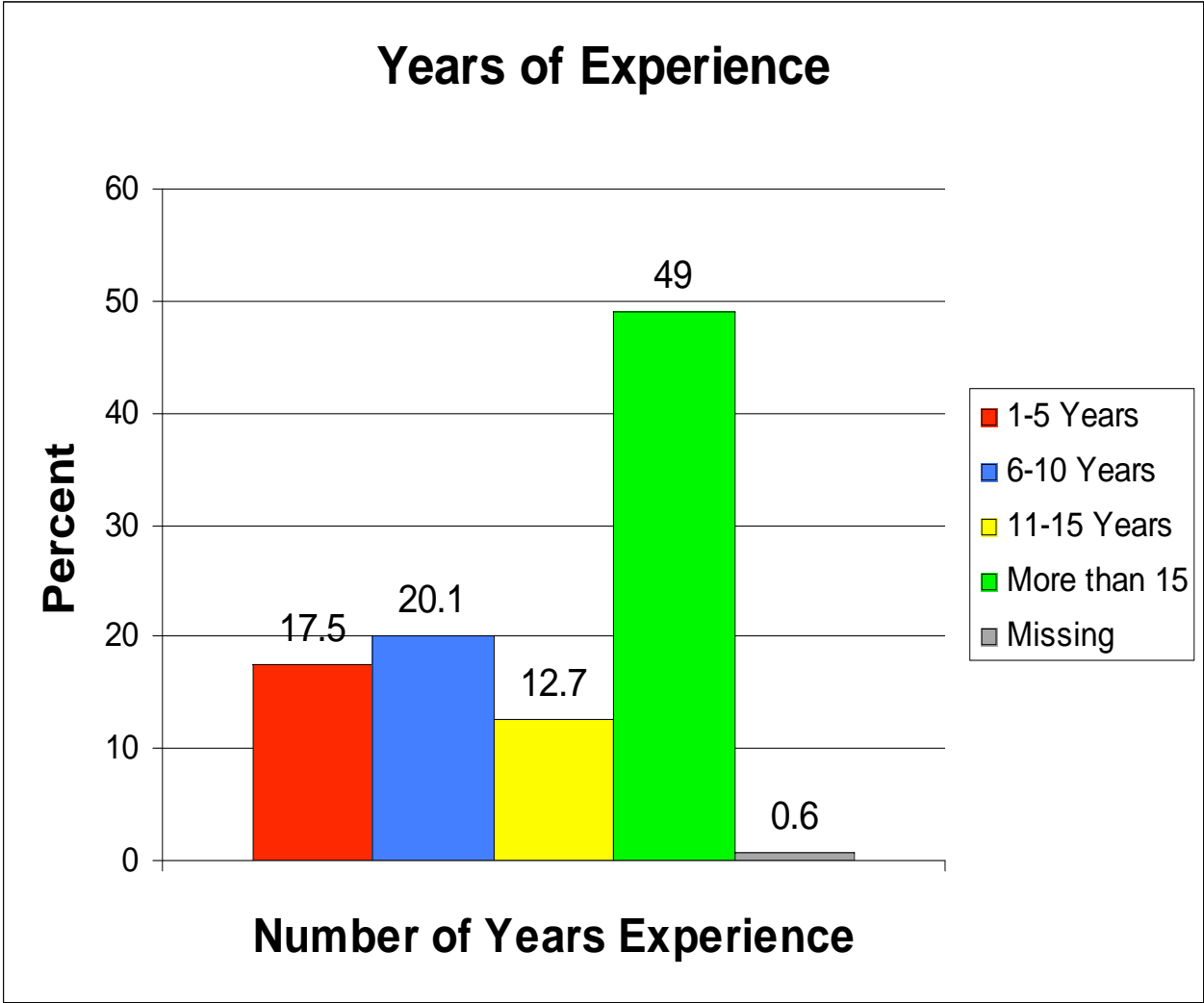
- Demographics were similar to national NASP survey, (Hunley, Harvey, Curtis, Portnoy, Grier, & Helffrich, 2000).
- Student ratio reported by Hunley et al. (2000) was lower than that reported by the present survey.

Problem-Solving/Rtl Survey: Demographic Information

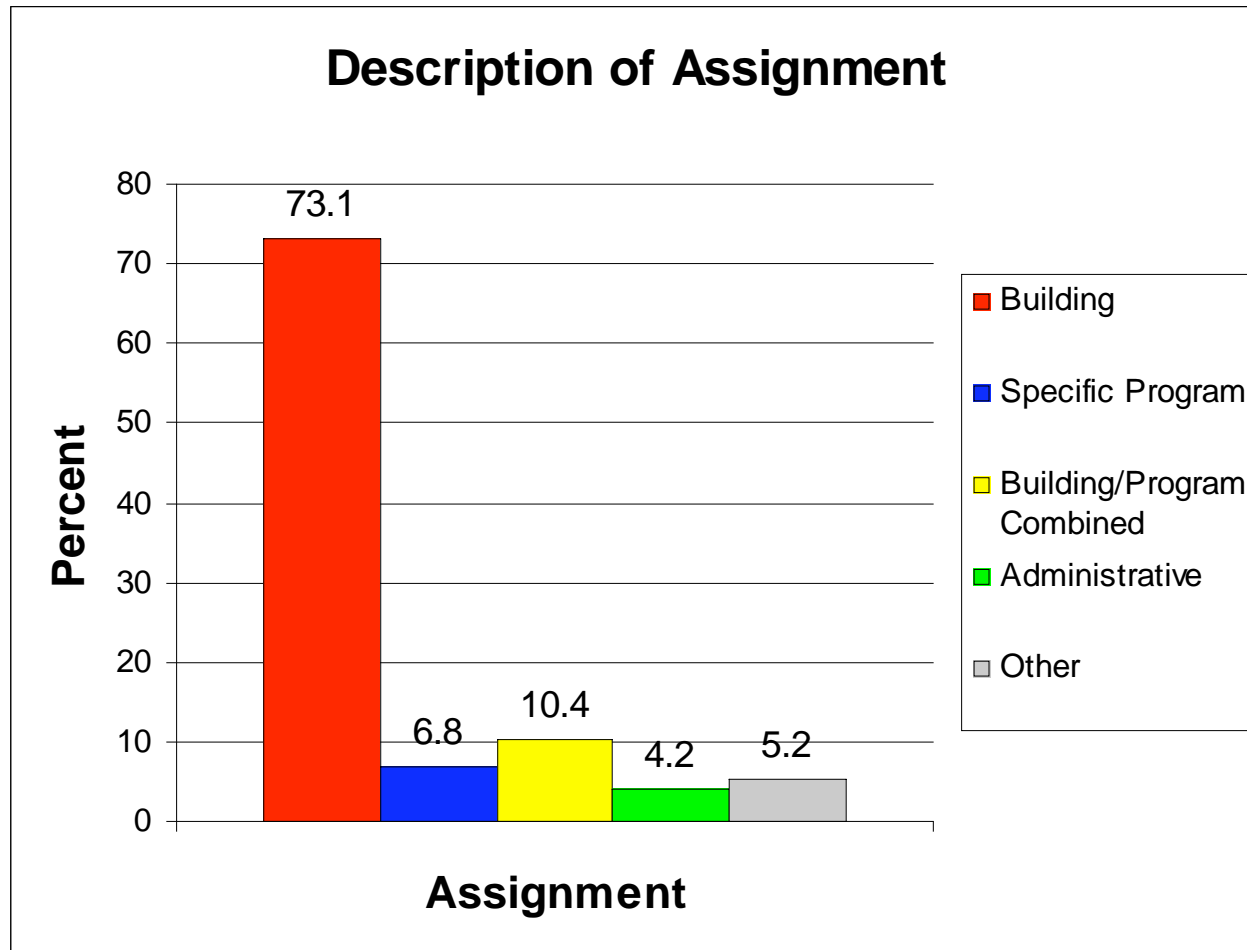
Highest Level of Training



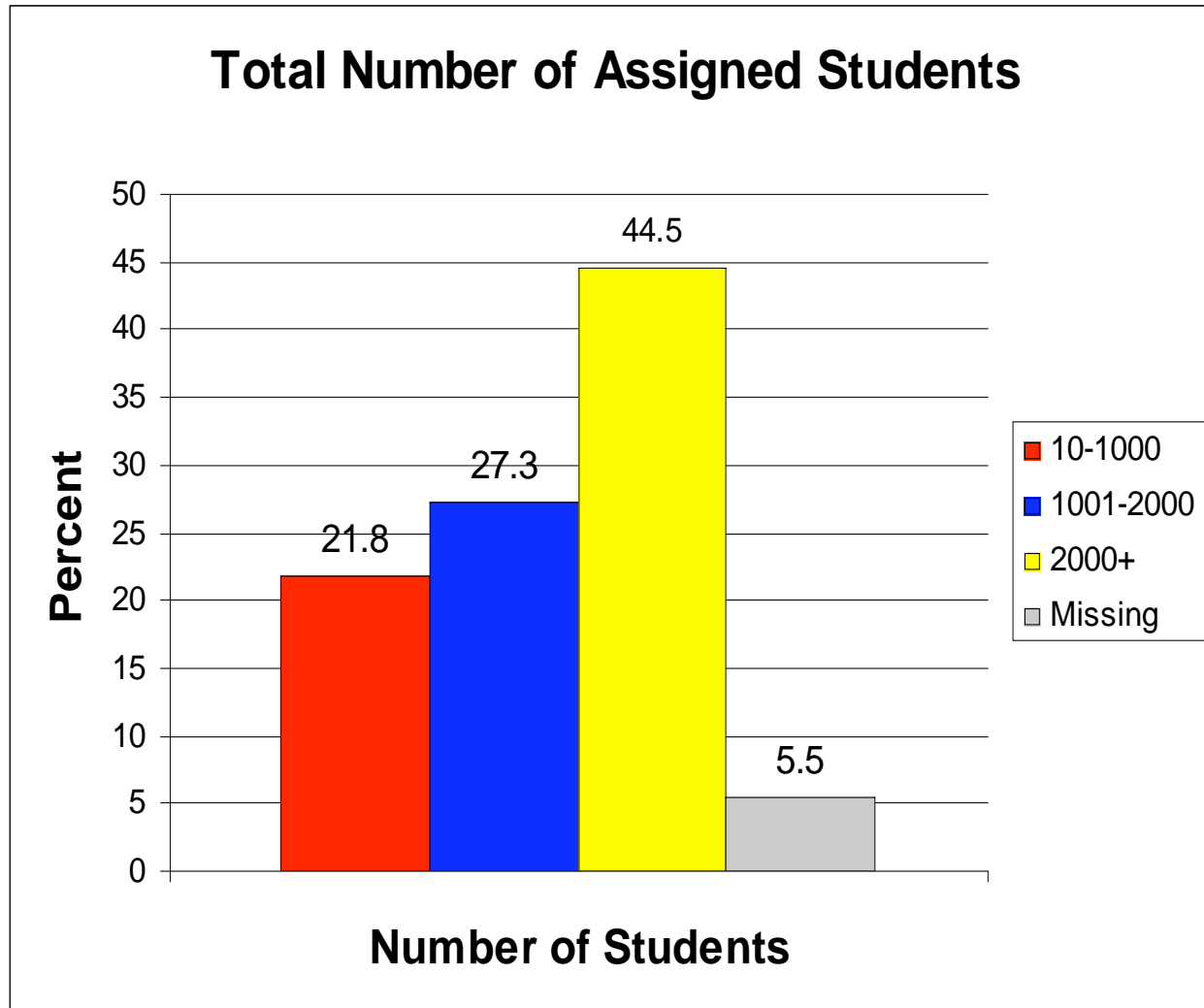
Years of Experience



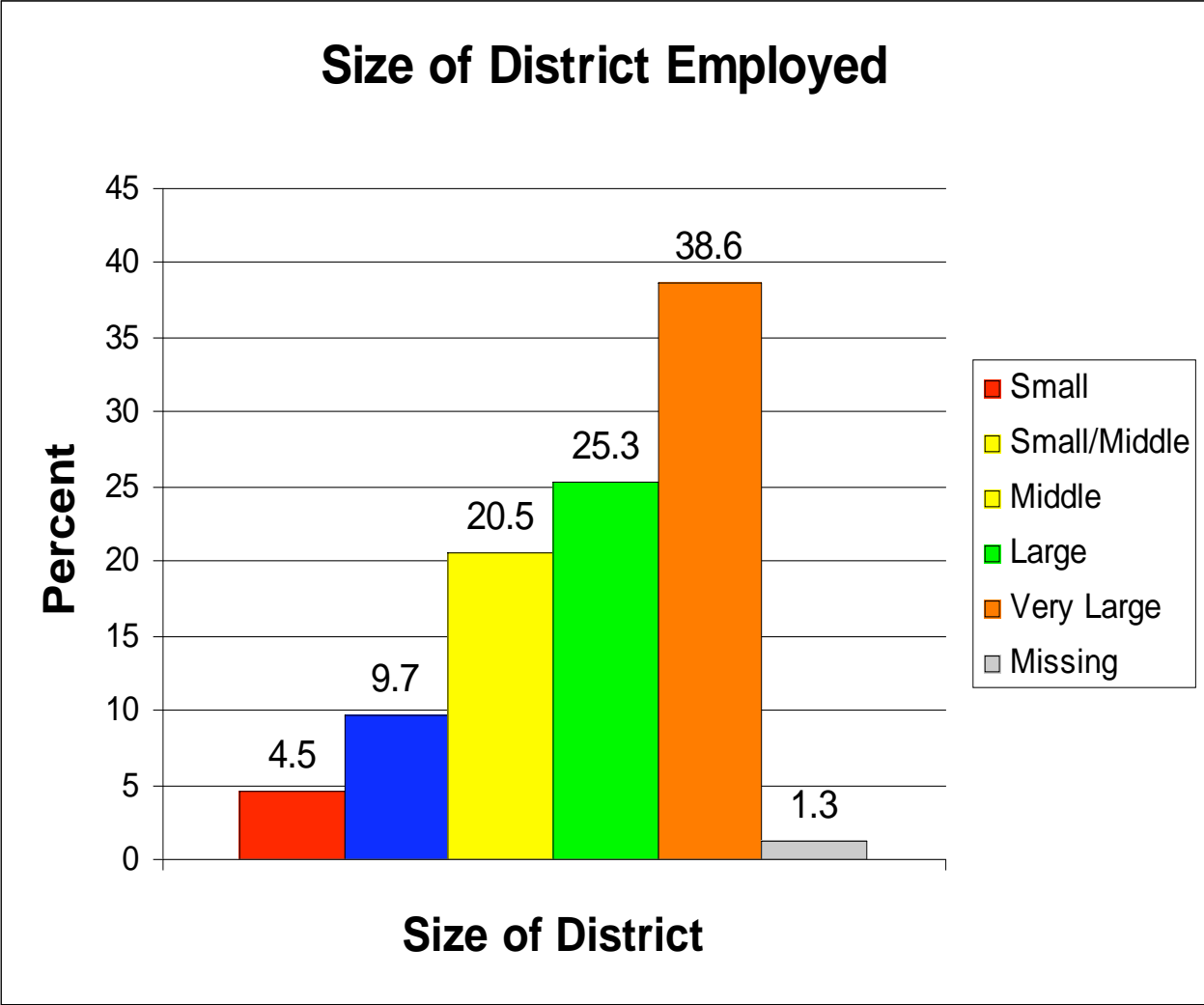
Description of Assignment



Psychologist:Student Ratio



Size of School District



School Psychologists' Beliefs about Problem-Solving/Rtl

School Psychologists' Beliefs about Problem-Solving/RtI

- A majority believed:
 - PS/RtI could accurately identify at-risk students (75%)
 - PS/RtI would accurately identify students for special education eligibility/determination (64.3%)
- A majority supported the use of PS/RtI for Spec Ed determination (64.3%)
- Responses to some questions were divided.
 - PS/RtI would over identify students for special education
 - Current special education process improves student outcomes

School Psychologists' Beliefs of Problem-Solving/RtI, cont.

What is your level of agreement with the following statements?	Disagree	Neutral	Agree
	%	%	%
I Could Use PS/RtI with Training	5.2	7.8	83.8
Believe PS/RtI Can Accurately Identify Students At-Risk for Academic Failure	5.9	16.6	75.0
Support Use of PS/RtI for Spec Ed Services	7.5	16.6	73.1
PS/RtI Should be Used in Conjunction With Norm-Referenced Cognitive Measures	9.4	15.3	72.8
IQ and Achievement Measures Differentiate School Psychologists	13.3	14.0	70.2
Support PS/RtI for Spec Ed Eligibility Determination	12.3	21.1	64.3

School Psychologists' Beliefs of Problem-Solving/RtI, cont.

What is your level of agreement with the following statements?	Disagree	Neutral	Agree
	%	%	%
Comprehensive Psych Assessment Must Include Norm-Referenced Cognitive Processing Measure	24.1	17.5	55.9
Believe RtI Will Make It Easier to Obtain Access to Services	14	29.9	53.6
I Possess the Skills to Use PS/RtI	30.9	19.2	40.7
Current Special Ed Referral Process Improves Outcomes	31.1	27.9	37.6
RtI for SLD Eligibility Determination Will Over-Identify Students for ESE Services	33.1	29.2	34.1
RtI Will Diminish Need for School Psychologists	53.9	21.8	21.7

School Psychologists' Job Satisfaction: Current and Future

- Currently:
 - 80.2% are currently “Very Satisfied” or “Satisfied”.
- If their district were to implement Problem-Solving/Rtl:
 - 82.4% would be “Very Satisfied” or “Satisfied” if PS/Rtl were implemented.

School Psychologists' Job Satisfaction: Current and Future

Satisfaction With <i>Current</i> Roles and Responsibilities	%
Very Satisfied	20.5
Satisfied	59.7
Dissatisfied	13.6
Very Dissatisfied	1.9

Satisfaction With <i>Future</i> Roles and Responsibilities	%
Very Satisfied	28.2
Satisfied	54.2
Dissatisfied	7.8
Very Dissatisfied	2.3

School Psychologists' Practices

The background features a light blue gradient at the top, transitioning into a series of horizontal bands in various shades of blue. Two thin, slightly curved lines cross the page from the left side towards the right, intersecting the horizontal bands.

How often do school psychologists use the steps of Problem-Solving/RtI?

- Has anything changed since previous research (Flugum & Reschly, 1994)?
- School psychologists did not consistently:
 - Graph baseline and progress monitoring data (81%, sometimes or never)
 - Establish peer group level of functioning (67.9%, sometimes or never)
 - Monitor progress of students (65.6%, sometimes or never)
 - Implement intervention based upon hypotheses (57.1%, sometimes or never)

How often do school psychologists use the steps of Problem-Solving/RtI?

- Problem identification occurred consistently about half of the time (49% often or always).

How often do the following practices take place when responding to a request for assistance?

Problem-Solving Step/ Practice	Never	Sometimes	Often	Always
	%	%	%	%
Graph Baseline Data	37.3	43.5	10.1	6.8
Graph Progress Monitoring Data	39.6	39.6	10.7	7.5
Establish peer group level of functioning	22.4	45.5	22.4	8.1
Conduct Progress Monitoring to Evaluate Interventions	20.1	45.5	22.7	9.7
Assess Effective Environment	18.8	40.9	27.9	10.4
Define Problem and Desired Behavior	7.8	40.9	30.2	19.2

How often do the following practices take place when responding to a request for assistance?

Problem-Solving Step/Practice	Never	Sometimes	Often	Always
	%	%	%	%
Quantify Peer and Target Student Performance Gap	24.7	39.6	24.7	9.4
Implement Interventions Based Upon Hypotheses	18.8	38.3	27.9	12
Develop Goals for Expected Growth	12.3	37.3	32.8	15.3
Establish Desired Level of Functioning	14.3	36.0	30.5	13.6
Develop Hypotheses	14.3	33.8	32.5	17.2
Establish Behaviors in Measurable Terms	6.2	33.1	38	21.1
Conduct Assessment to Accept/Reject Hypotheses	18.5	31.2	32.1	15.9

Progress Monitoring Practices

The background features a light blue gradient. A thin, dark blue line descends from the left side towards the right, crossing a horizontal line. Below this, there are several horizontal bands of varying shades of blue, creating a layered, abstract design.

How often are the following methods used to conduct *progress monitoring* of interventions?

- Most likely to use:
 - Grades (81.5%, always or often)
 - Teacher Report (69.2% always or often)
- Least likely to use:
 - Norm Referenced Cognitive Assessments (79.8% sometimes or never)
 - Norm Referenced Process Assessments (80.5%)

Progress Monitoring Practices

How often are the following methods used to conduct progress monitoring of interventions?

	Never	Sometimes	Often	Always
	%	%	%	%
Teacher Report	3.9	12.3	52.6	28.9
Grades	8.1	20.5	46.1	23.1
Behavior Observations	5.2	35.7	46.1	10.7
CBM Local Norms or Benchmarks	11.0	25.3	45.8	14.9

Progress Monitoring Practices

How often are the following methods used to conduct progress monitoring of interventions?

	Never	Sometimes	Often	Always
	%	%	%	%
Informal rating scales	12.3	39.9	39.0	6.5
Normed-Referenced Achievement Tests	33.4	36.4	21.1	6.8
Norm-referenced behavior rating scales	25.6	45.1	22.1	4.9
Normed-Referenced Cognitive Assessments	50.6	29.2	11.7	6.2
Norm-referenced process assessments	52.6	27.9	11.4	5.8

Intervention Development Practices

The background features a light blue gradient at the top, transitioning into a series of horizontal bands in various shades of blue. Two thin, parallel lines slope downwards from the left side towards the right, intersecting the horizontal bands.

Intervention Development Practices

- **Likely** to be involved in developing:
 - Individual Behavior Management Interventions (67% often or always)
- **Less likely** to be involved in developing:
 - Building Level Curricular Decisions (92% sometimes or never)
 - Individual academic interventions
 - Group therapy or social skills training

Intervention Development Practices

How often are school psychologists directly involved in the development of interventions to address the following areas?

	Never	Sometimes	Often	Always
	%	%	%	%
Individual Behavior Management	5.2	25.6	52.6	14.3
Science/Social Studies	11.7	37.7	40.6	8.1
Reading/Language Arts	13	48.1	32.5	4.2
Written Language	18.2	48.7	26.6	4.2
Mathematics	17.2	51.6	25.3	3.9
Group Counseling/Skill Training	25.6	47.1	19.2	5.8
Building-level Curricular Decisions	65.3	26.6	5.8	.3

Resources for Intervention Development

The background features a light blue gradient. Two thin, parallel lines slope downwards from the left side towards the right. Below these lines, there are several horizontal bands of varying shades of blue, creating a layered, water-like effect.

Resources for Developing Interventions

- Likely to utilize:
 - Clinical Experience (63.7% often or always)
 - Programs available at school or district (60.1% often or always)
- About half of the school psychologists surveyed indicated that they utilized:
 - Inservice training
 - School-wide interventions

Resources for Developing Interventions

- Less than half utilized:
 - Graduate School
 - Home Study
 - Professional Organizations
 - Internet Resources
- Were not likely to utilize:
 - Professional Journals (80% sometimes or never)

Resources for Developing Interventions

How often do you use the following resources when developing an intervention plan for a student?

	Never	Sometimes	Often	Always
	%	%	%	%
Interventions you learned through clinical experience	6.8	26.9	49.7	14.0
Programs available through the school/district	4.2	32.5	51.0	10.1
Interventions learned at an in-service	4.5	35.4	51.9	6.2
Interventions delivered to all students in the school(s)	7.8	36.4	40.9	10.4

Resources for Developing Interventions

How often do you use the following resources when developing an intervention plan for a student?

	Never	Sometimes	Often	Always
	%	%	%	%
Interventions you learned through home study	14.6	41.9	36.4	3.6
Interventions you used in graduate school	16.9	39.3	34.4	6.8
Professional Organizations	10.7	48.7	34.1	4.5
Internet-based intervention resources	16.2	44.8	31.8	4.5
Peer-reviewed journal	32.1	48.1	14.9	1.6

Training Priorities for PS/Rtl Implementation

The slide features a light blue gradient background. In the lower half, there are several horizontal blue bands of varying shades. Two thin, parallel lines slope downwards from the left side towards the right, crossing the horizontal bands.

Training Priorities for PS/Rtl Implementation

- Skills relating to PS/Rtl were high priority.
 - Problem-solving steps
 - Academic intervention development
 - Behavior intervention development
 - Response-to-intervention
 - Consultation
 - Tiered model of service delivery

Training Priorities for PS/Rtl Implementation

- Skills relating to ability/achievement testing were low priority.
 - Cognitive Assessment (77% Low Priority)
 - Achievement Assessment (76% Low Priority)

Training Priorities for PS/Rtl Implementation

Training Priorities for School Psychologists

	High Priority	Priority	Low Priority	Lowest Priority
	%	%	%	%
Response-to-Intervention	55.8	29.2	8.1	3.9
Academic Intervention Development	43.5	32.5	11.7	8.4
Progress Monitoring	41.9	35.7	13.6	5.5
Behavioral/Social/Emotional Intervention Development	41.2	35.4	14.3	5.8
Program Evaluation	40.3	35.4	15.9	5.2
Problem-Solving Method	38.3	36.4	16.2	5.2

Training Priorities for PS/RtI Implementation

Training Priorities for School Psychologists

	High Priority	Priority	Low Priority	Lowest Priority
	%	%	%	%
Tiered Model of Service Delivery	36.4	39.0	16.9	4.9
Goal Setting	36.0	35.4	19.2	5.8
Curriculum-Based Measures	26.3	38.3	25.0	7.1
Consultation	17.9	35.1	34.1	8.8
Functional Behavioral Assessment	20.1	33.4	28.9	14.3

Training Priorities for PS/Rtl Implementation, cont.

Training Priorities for School Psychologists

	High Priority	Priority	Low Priority	Lowest Priority
	%	%	%	%
Behavioral Observations	15.3	28.9	35.1	17.5
Cognitive Assessment	9.4	10.1	30.2	46.8
Achievement Testing	10.1	10.4	30.2	45.8

Sources of Training

The background features a light blue gradient. A thin, dark blue line descends from the left side towards the center. Below this, there are several horizontal bands of varying shades of blue, creating a layered effect.

Sources of Training

- 25% indicated they had **no** training in:
 - Tiered Service Delivery Model
 - Program Evaluation
- 10-15% indicated they had **no** training in:
 - Goal Setting
 - Progress Monitoring
 - Response-to-Intervention

Sources of Training

- The modal source of training for many skills relating to PS/Rtl was ***in-service***
- The modal source for skills relating to achievement and cognitive assessment was ***pre-service***

Sources of Training

For each of the following practices, circle the choice that best reflects the source of your training.

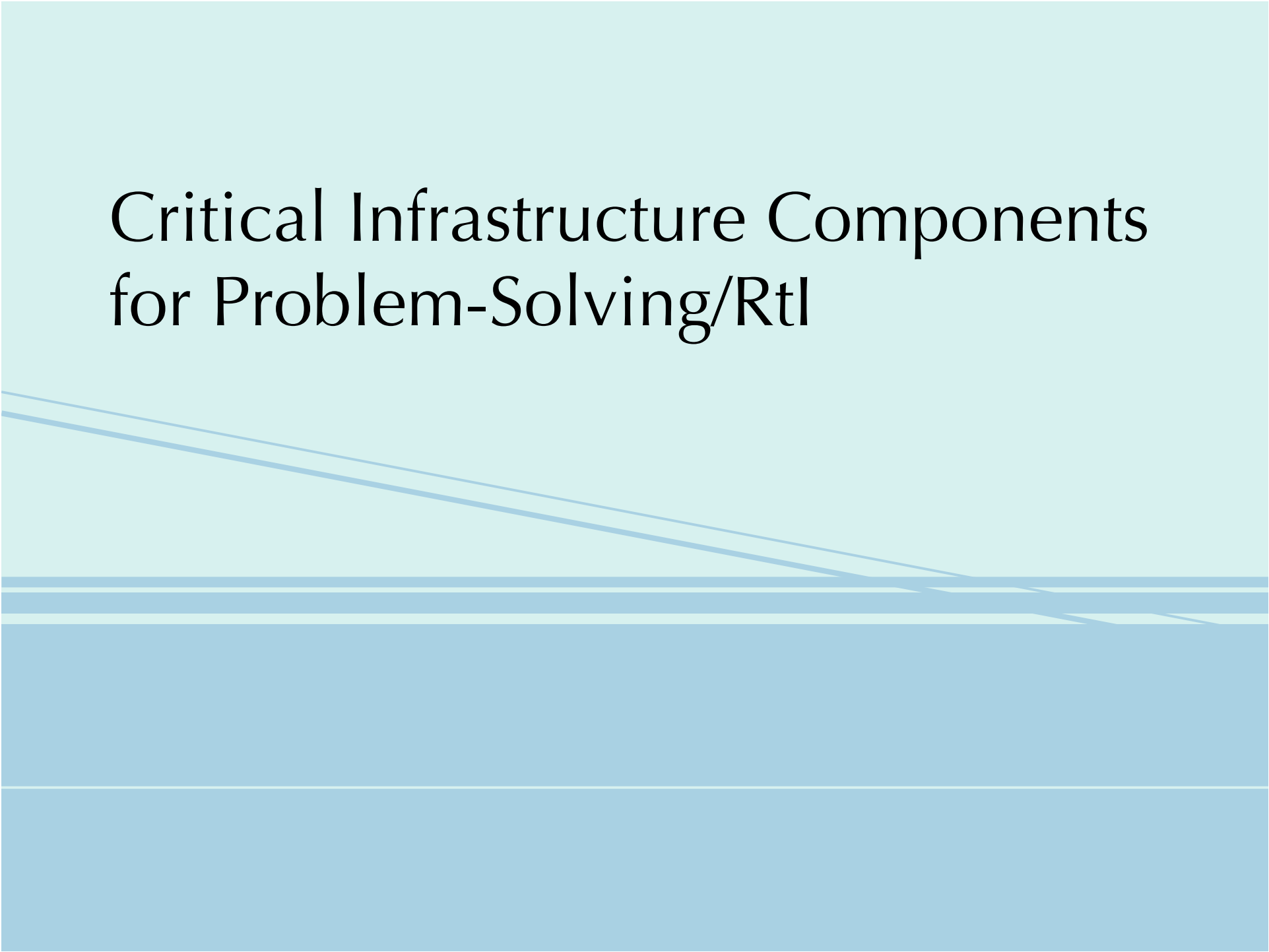
	Pre-service	In-service	Self-initiated	No Training
	%	%	%	%
Tiered Service Delivery Service	22.7	40.3	9.1	25.6
Program Evaluation	27.6	29.9	14.9	24.7
Goal Setting	27.6	31.8	22.7	13.6
Progress Monitoring	23.1	46.1	14.6	13.6
Response-to-Intervention	18.8	56.2	11	10.7

Sources of Training

For each of the following practices, circle the choice that best reflects the source of your training.

	Pre-service	In-service	Self-initiated	No Training
	%	%	%	%
Curriculum-based Measures	28.2	51.9	7.1	6.2
Problem-Solving Method	27.9	51.9	10.4	5.8
Academic Intervention Development	41.1	31.2	19.5	3.6
Beh/Soc Intervention Development	42.2	29.2	18.5	2.9
Functional Behavior Assessment	25.3	57.8	10.1	1.9
Consultation	57.5	22.4	13.6	.6
Behavioral Observations	57.5	22.4	13.6	.6
Achievement Testing	69.2	18.5	5.8	0
Cognitive Assessment	75.9	17.9	4.9	0

Critical Infrastructure Components for Problem-Solving/Rtl

The slide features a light blue gradient background. In the lower half, there are several horizontal blue bands of varying shades. Two thin, parallel lines slope downwards from the left side towards the right, crossing the horizontal bands.

Critical Infrastructure Components for Problem-Solving/Rtl

- Majority of school psychologists believe many components are present.
- Lower percentages were reported for:
 - Academic and Behavior Interventions
 - Intervention/Assessment Accountability
 - Flexible Scheduling Options

Critical Infrastructure Components for Problem-Solving/Rtl

Indicate if the following services are present or absent at your school/district:

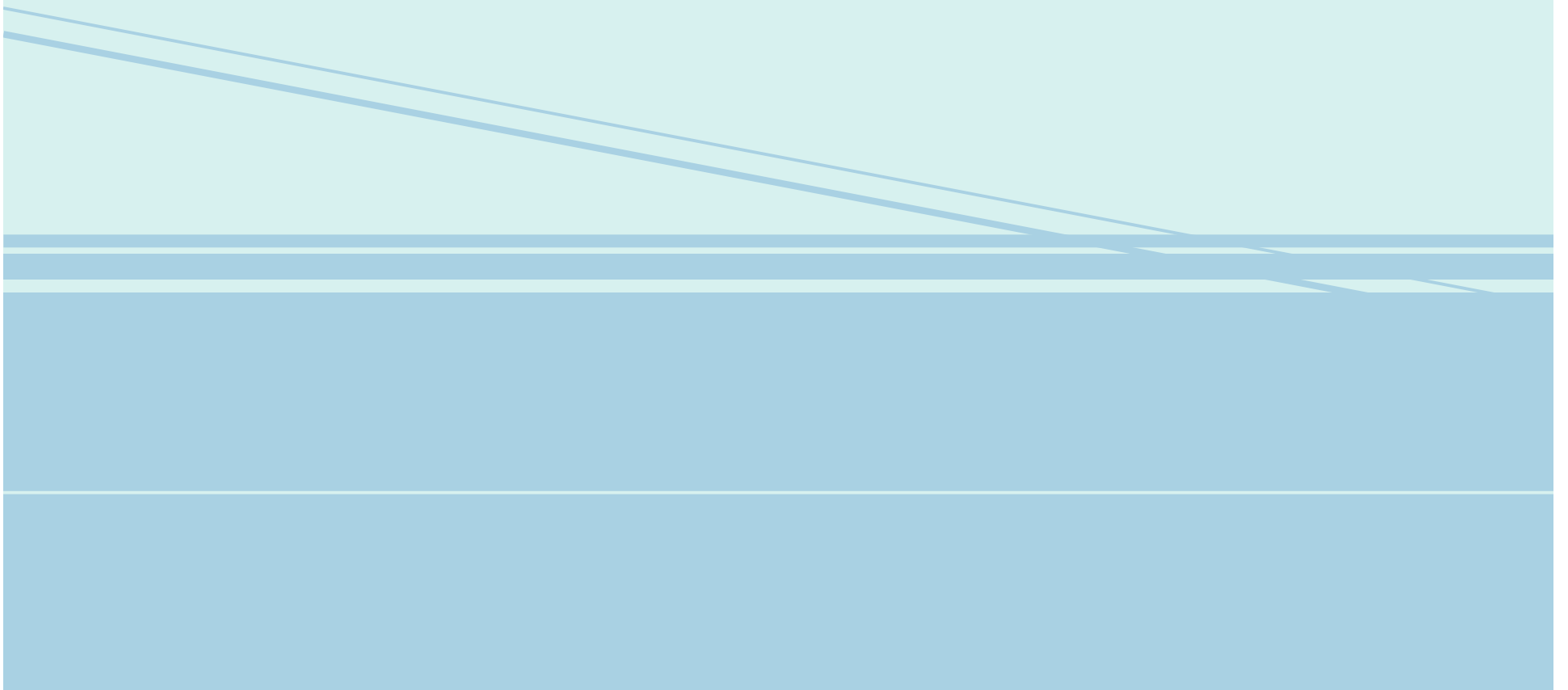
	Yes	No
	%	%
Inclusion of ESE students in general education	97.1	1.0
Early Identification/Intervention	92.5	5.8
Academic progress monitoring	90.6	7.1
Effective instruction in general education	89.3	6.2
General education and special education collaboration	86.7	10.4

Critical Infrastructure Components for Problem-Solving/RtI

Indicate if the following services are present or absent at your school/district:

	Yes	No
	%	%
Flexible behavioral interventions for diverse populations in general education	64.9	29.9
Flexible scheduling options	63.2	32.8
Intervention/Assessment Accountability	60.4	35.4
Flexible curriculum interventions for diverse populations in general education	59.4	32.5

Areas Identified for Additional Training



Areas Identified for Additional Training

- Strong agreement that additional training *is needed* in:
 - Steps of Problem-Solving
 - Consultation
- Strong agreement that additional training *is not needed* in:
 - Norm Referenced Cognitive Assessment
 - Norm Referenced Achievement Assessment

Areas Identified for Additional Training

In what areas do you believe additional training is needed in order to implement Problem-Solving/Response to Intervention in your school(s) with integrity?

	Agree	Disagree
	%	%
Program Evaluation	90.9	5.2
Intervention Development	90.3	5.8
Progress Monitoring	89.6	6.4
Data-based Decision Making	89.0	7.1
Goal Setting	88.0	8.5
Tiered model of service delivery	87.7	6.8
4 Stages of Problem-Solving	86.4	9.4

Areas Identified for Additional Training

In what areas do you believe additional training is needed in order to implement Problem-Solving/Response to Intervention in your school(s) with integrity?

	Agree	Disagree
	%	%
Curriculum-based Measures	83.5	12.0
Consultation	78.6	17.5
Functional Behavioral Assessment	69.5	26.3
Behavioral Observation	66.9	28.6
Achievement Testing	30.5	65.6
Cognitive Assessment	27.0	68.8

Implications for State-Wide Problem-Solving Initiative

- Significant training is required
- Use of web-based technology is essential
- GAP between needed and existing skills is significant
- Belief system and PSM/Rtl is congruent
- Curricular changes at preservice level are necessary
- Change will required consistent effort over significant period of time (4-6 years)

Comments? Questions?

<http://sss.usf.edu>