Do you currently use RTI?

Meaningful Occupation + RTI
Implementing Occupational Interventions in the General Education Setting

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Objectives

Overview of MTSS + RTI	Meaningful OT at School	Understand + Identify Barriers and Opportunities
Tiered Case Studies	Learning Lab	Resources

Why School Based OT's Should Be Involved In RTI

Increased Access to Occupational Therapy
- Allows OT's to support occupational performance for both special education students and general education students

Current Educational Models and OT
- Aligns our profession with current educational models

New Model to Support Students
- Moves away from "Wait and Fail" model
- May reduce number of students on OT caseload

OT, PEO, and School
- OT's are uniquely skilled in activity and environmental analysis.
- PEO model- Person- Environment- Occupation "acknowledges that occupational performance cannot be separated from contextual influences, temporal factors, and physical and psychological characteristics of the person" (Law et al. 2005, p14) (Bolinger, 2009)

Early Intervening Services Support Student Success

What Are Early Intervening Services?

Preventative Model within General Education	Part of IDEA's federal statutes to support at risk students	Response to Intervention
Consistent with updated CDC Developmental Milestone guidelines	Emphasis on K-3 students who may have poor learning outcomes	Services to struggling learners with academic and/or behavioral health

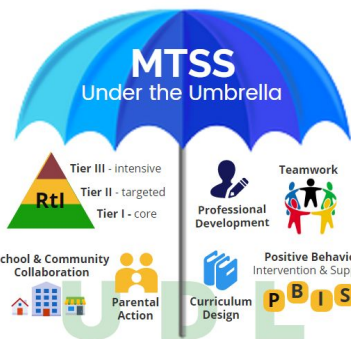## Funding for Related Services + Early Intervening Services:

Primary Funding for Related Services: IDEA

- Individuals with Disabilities Education Act
- Passed in 1975
- Federal funding to states agreeing to implement the 3 step process
  - Identify Affected Students
  - Develop Program
  - Provide Services
- Primary Funding for OT and Related Services
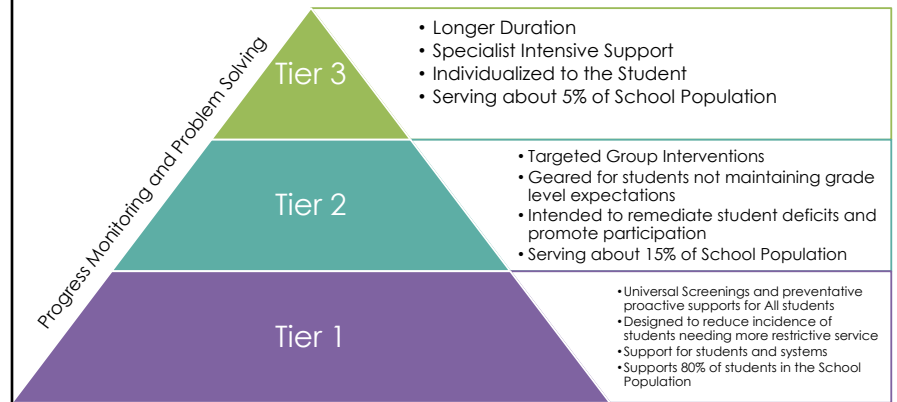
Funding for MTSS

- Every Student Succeeds Act (ESSA) and other funding sources like state grants
- Funds are used for:
  - Professional Learning
  - Supporting Student's Social Emotional Needs
  - Supporting Rural School Districts
  - Addressing target populations

MTSS: Opportunities to Support

MTSS
Under the Umbrella

Tier III - intensive
Tier II - targeted
Tier I - core
RtI

Teamwork

Professional Development

Positive Behavior Intervention & Support

School & Community Collaboration

Parental Action

Curriculum Design

PBIS

UDL

- **RTI:** Focus on specific interventions supporting academics and behavior
- **PBIS:** Positive Behavioral Interventions + Supports
- Designed to Enhance school and community collaboration
- Collaborative Curriculum Design
- Supports Teamwork between parents, schools, and within teams

Understanding Multi-Tiered Systems of Support

Progress Monitoring and Problem Solving

Tier 3
- Longer Duration
- Specialist Intensive Support
- Individualized to the Student
- Serving about 5% of School Population

Tier 2
- Targeted Group Interventions
- Geared for students not maintaining grade level expectations
- Intended to remediate student deficits and promote participation
- Serving about 15% of School Population

Tier 1
- Universal Screenings and preventative proactive supports for All students
- Designed to reduce incidence of students needing more restrictive service
- Support for students and systems
- Supports 80% of students in the School Population

Required Features of RTI Framework + Core Principals

Intervene Early (not wait and see model)	Use High Quality, Research-Driven Interventions + Instructions
All Students are Teachable	
Use of Universal Assessments for Screenings, Diagnostics, + Progress Monitoring	Progress Monitoring, Data Collection, Problem Solving inform instruction + Next Steps

RTI's Goal is to Reduce Tier 3 Intervention

RTI

High Quality Instruction or Intervention is modified based on the student's response to the intervention

Learning Rate and Level Of Performance are monitored and used for decision making or next steps

Problem solving next steps takes into consideration intervention duration, intensity, and student response

Advantages of RTI for students and educational system

Advantages for Students	Advantages for Educational Systems
• Focus shifts to providing effective instruction • Does not require teacher or parent referral • Allows students access to intervention immediately • Formal, timely assessment process only after data collected on student's response to general supports	• Reduces the number of minority and low income students referred for special education • Provides interventions for students who are transient or have limited English proficiency • Referrals to Special Education may be reduced • Promotes unity of special education and general education and can support a seamless and collaborative system

Important Clinical and Practice Implications for RTI

- The IDEA supports Occupational Therapist's involvement in the RTI Process as providers of early intervening services in general education

- OT scope of practice is supporting health and participation through occupation

- In school, the "client" may be defined as students, families, educators, and/or organizations (schools)

- AOTA currently endorses a paradigm shift from caseload to work load to caseload in the educational model

- In California, the PT OT Guidelines

Understand Direct + Indirect Approaches

Know State Practice Act + Licensure Laws

Understand when Parent Consent is Required

State Practice Act Referral + Evaluation Procedures
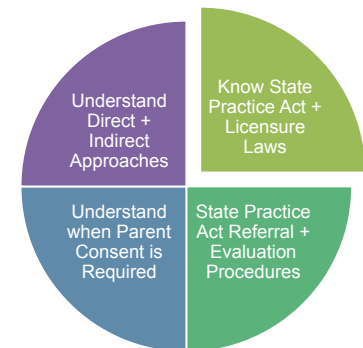
What are Barriers to RTI in Schools?

Types of service in which OT can contribute to RTI

System Supports	• Professional Development • Task Forces • Program Evaluation • Curriculum or Action Committees
Team Supports	• In-Services • Collaboration Consultation • Co-teaching • Progress monitoring
Student Support	• Provide the classroom intervention strategies to target and build specific skills • Environmental modifications to assist and improve educational access

(Bolinger, 2009)

Tier 1 Supports and OT role

System
Make universal recommendations on research based strategies
Serve on district curriculum committees

Team
OT can provide education and training to teachers on research-based strategies
Ex. In-service workshop

Student
• OT's can assist with universal screenings (grade level probes)
• Educational screenings are Informal in nature. Different from formal screenings used during an evaluation process

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Case Study + Examples of Tier 1 Interventions

System Support
• Design of campus sensory pathways
• Providing visuals or spaces in the classroom for self regulation
• Serve on curriculum committee for adoption of handwriting programs
• Self-Regulation School-Wide Program
• School-Wide playground rules

Team Support
• Inservice on Fine Motor Development for K-1
• Inservice for parents on emotional regulation
• Assist in computer lab setup to promote optimal ergonomics
• Teacher's mental health/ occupational balance
• "Friday 5" OT tips newsletter in lounge

Student Support
• Integration of flexible seating options into GE classroom
• Providing intervention strategies for self regulation to classroom teacher
• Suggestions for optimal positioning of students during fine motor tasks
• In Class Self-Regulation lessons
• Alternative paper

Tier 1 Discussion

What are examples at your school site of Tier 1 interventions?

What is Your Role on the MTSS/RTI Team?

Tier 1 Progress Monitoring and Data Collection

- Surveys of teacher and staff pre and post intervention
- Learning Without Tears Screening
- Minnesota Handwriting Assessment
- Zones of Regulation Inventory, Learner Self-Reflection

Case Study

Tier 1 Intervention at a California TK-3 Elementary School

Effects of Covid On School Aged Children:
Need for Tier 1 Intervention at K-3 Elementary School

Children + adolescents were found to **experience more depressive and anxious symptoms** as compared to pre - pandemic data (Samji et al., 2021)

School Response: Promote activities + interventions focused on **Stress management, Connection, Relationship, + Regulation Skills**

Finger Knitting as a Tier 1 Intervention Approach

Finger knitting:
A knitted chain created utilizing one's hands + fingers rather than traditional tools such as knitting needles

Product:
Result is typically one long chain stitch which can be versatile + made into many different objects

Age Range + Population:
Children ages five + older are typically able to learn this skill

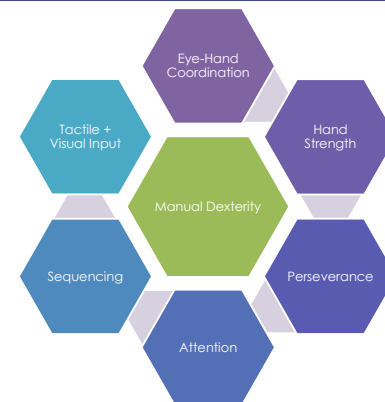## Finger Knitting as a Therapeutic Activity + Supporting Data

Hobbies are found to:
- Reduce stress
- Provide social connection + support
- Promote positive feelings of: accomplishment, creativity, + control

(Thayer, 2001)

Knitting in a group was reported to:
- Improve:
  - Social confidence + feelings of belonging
- Enable:
  - Feelings of control, relaxation + contribution

(Corkhill, Hemmings, Maddock + Riley, 2014)

Other Therapeutic Benefits of Finger Knitting

Eye-Hand Coordination
Tactile + Visual Input
Hand Strength
Manual Dexterity
Sequencing
Perseverance
Attention

Implementation of Finger Knitting as Tier 1 RTI Approach

Participants:
2nd grade level- made up of three classes (A, B, C)
Supporting Staff: OT, OTS, and instructional aide

Time:
Lunch recess one day a week for a duration of 6 weeks

Supplies:
Yarn and classroom space

Group Structure:
*5 minute whole group instruction on finger knitting followed by 15 minutes of small group or individual practice.
Week 1: Invited class A. 12 students participated. By the end of first session, 6 were able to finger knit at independent level.
Week 2: Invited class B. 20 students participated. Returning students from class A supported students from class B. By end of session, 50% of students were independently finger knitting.
Week 3: Invited class C. 25 students participated. Returning students from class A and B supported students from class C. By end of group, 15 students were at independent level.
Weeks 4-6: By then end of week six, group size fluctuated between 15-20 students each week. All students were at either minimal assist or independent level finger knitting.

Outcomes of Finger Knitting as Tier 1 RTI Approach

Finger Knitting Established as a Systemwide Support
- Finger knitting group continued throughout the remainder of the school year
- The group was re-established the following year when students entered 3rd grade
- 2nd grade finger knitting group was created for incoming second grade students

Team Collaboration Established
- School counselor attended several weekly groups + now uses finger knitting as a regulation strategy when working with students
- RSP, General Education teachers, and Administration attended groups + observed students

Student Supports Embedded on Campus for Regulation and Fine Motor
- During recess, students are able to request yarn and sit on steps to finger knit if they prefer a quiet activity or need to self regulate

Students Motivated to Participate
- When second grade teachers polled students at end of school year:
  - "The Naughty Knitters" was ranked #1 as "Favorite Part of Second Grade"

Learning Lab

Finger Knitting with Children

5-4-3-2-1

Name

5 things you can see
4 things you can touch
3 things you can hear
2 things you can smell
1 thing you can taste OR 1 emotion that you feel

Tier 2 Supports and OT role

Team Support

- Assist GE staff by providing training resources and materials
  - Tools to Grow: www.toolstogrowot.com
    - Handouts for a variety of performance areas
    - RTI - OT Checklists for Implementing Strategies and Tracking Response
    - RTI Data Collection & TRACKING Forms - For Teacher Use
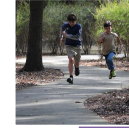
Student Support

- Targeted group interventions to at risk children

Case Study Examples of Tier 2 Interventions

Team Support

- App Recommendation for Letter formation practice- IPAD
- Providing intervention strategies for a group of students struggling to develop letter placement and remediate letter reversals
- OT leads a center during rotations

Student Support

- Super Secret Running Club- SSRC
- Providing organizational strategies for middle school students
- Online handwriting support + videos during Covid
- Lunchtime & recess support- craft/game club

Small Group Discussion

In small group, discuss additional ideas for Tier 2 supports and interventions?

What is Your Role on the MTSS/RTI Team?

Slide 1: Tier 2 Progress Monitoring and Data Collection

- Check in, Check out
- Fidget Tool Contract and Learner Self-Reflection

Paw Print Card
We Expect Your Best!

Date _____
Student _____

0=No 1=Sorta! 2=Great!	Be Safe Keep hands, feet and objects to self	Be Respectful Use kind words and actions	Be Responsible Follow directions first time given	Teacher Initials
8:30 AM to AM Break	0 1 2	0 1 2	0 1 2	
AM Break to Lunch	0 1 2	0 1 2	0 1 2	
Lunch to PM Break	0 1 2	0 1 2	0 1 2	
PM Break to End of day	0 1 2	0 1 2	0 1 2	
Total Points = Points Possible = 24 (18 Fridays)		Today _____% Goal _____%		

Successes: _____
Parent Signature_____

Self-Reflection: Do Sensory Fidgets Help Me?

Try using your sensory fidget when doing your schoolwork or trying to focus. Circle your answers and write any notes to keep track of your experience.

How do you feel right now?
- Happy
- Okay
- Frustrated
- Tired
- Calm

How long did you use it?
- 1 minute
- Around 5 minutes
- Around 10 minutes
- More than 10 minutes

Did it help you stay calm or focused?
- Yes, I stayed calm
- Yes, I stayed focused
- No, it didn't help
- I'm not sure

When did you use your fidget?
- During schoolwork
- During a break
- While playing or relaxing
- To help stay calm

What will you try next time?

NOTES:

YTS YOUR THERAPY SOURCE

Slide 2: Tier 2 Supports

Slide 3: Mindful Minute

Slide 4: Tier 3 Supports and OT role

Team Support
- Education to staff on diagnoses + OT processes
- Collaborative data collection on response to specific OT intervention

Student Support
- Intensive individualized interventions for children that do not respond to Tier 1 or 2
- Based on student specific needs

Case Study Examples of Tier 3 Interventions

Team Support

- Staff education on Sensory Processing Differences/Difficulties for a student with Autism
- Providing staff specific organizational strategies for a student with ADHD.
- Teacher consultation for environmental modifications for particular student

Student Support

- Assist in the development of appropriate structured sensory breaks for a student.
  - Providing headphones at lunch to assist with auditory sensitivity
  - Providing access to vestibular sensory input in classroom environment

Small Group Discussion

What are some ways that you have seen Tier 3 implemented at your school?

I need to cool down

I need to a break.
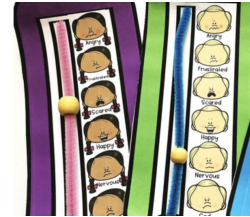
What is Your Role on the MTSS/RTI Team?

Tier 3 Progress Monitoring and Data Collection

- Self-monitoring checklists
- Develop a rubric for expected behaviors

The Wheel of Choice: A Problem-Solving Program
by Lynn Lott and Jane Nelsen

Becoming A Problem Solver

Problem: Tell who, what, how and why it happened

What was the result?

How should I have solved the problem? List 2 better methods.

1.

2.

How could I have prevented the problem?

What will I do from now on?

My Signature

Writing Assignment Checklist

Place a check next to the items completed.

Name_____ Class_____ Date_____

All sentences begin with a capital letter.	
All sentences have correct punctuation at the end.	
All sentences have a subject and a verb (are complete sentences)	
The first word of the paragraph is indented	
The paragraph has a topic sentence	
All sentences in the paragraph are on the same topic	
I followed instructions for the assignment	
I completed all parts of the assignment	

The goal for this writing assignment is _____

YouTube Video Refocus

Referral for Special Education Following RTI

OT assists in reviewing GE team data collected + provide input on next steps: Referral for Full + Individualized Evaluation or continue with general intervention strategies	Referral for Occupational Therapy evaluation should be made when OT + RTI team feel occupational performance would benefit from intensive, long term, more restrictive intervention	Follow outlined special education policies + procedures

The OT Role in PBIS
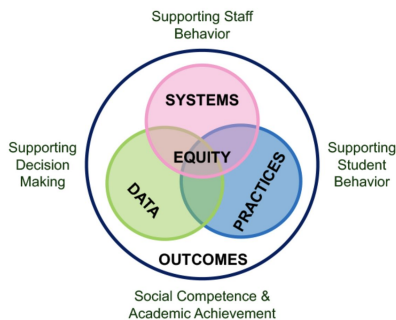
- OTs provide perspective from an occupation-informed lens
- Can offer insight to the neurological underpinnings of behaviors
- When OTs are part of PBIS because of our vast scope of practice we consider and ask out of the box questions that may be overlooked

A Manualized RtI Kindergarten Intervention for Sensory Processing

Who:
- 3 general education kindergarten classes (2 different schools)
- School 1 (n=11) Manualized tiered intervention
- School 2 (n=15) In-service & consultation
- School 3 (n=18) In-service only

Demographics:

36% female participants   64% male participants

66% (n = 25) Caucasian   13% (n = 5) Multiracial

0.08% (n = 3) Asian/Pacific Islander   0.05% Hispanic (n = 2)

0.03% (n = 1) not reported.

Diagnosis information:

11% with a known diagnosis   84% having no diagnosis

5% unknown

The known diagnoses included ADHD (n = 1) and unidentified speech issues (n = 3).

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Intervention:

10 week manualized intervention
- Aspects of the Zones of Regulation
- Weekly lessons on use of a calming corner,
- Mindfulness activities,
- Use of sensory tools in the classroom,
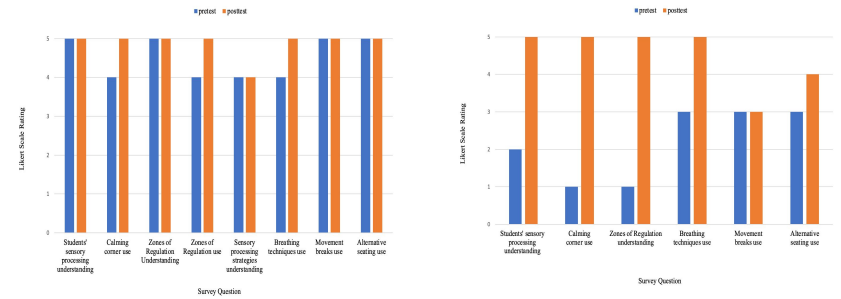- Weekly learner self-reflection

Teacher In-Service:

"Navigating Classroom Behaviors from an OT Lens"

- Sensory Processing
- All behavior is communication
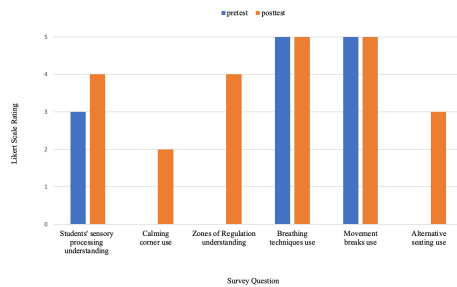- Modifying the environment
- Co-regulation
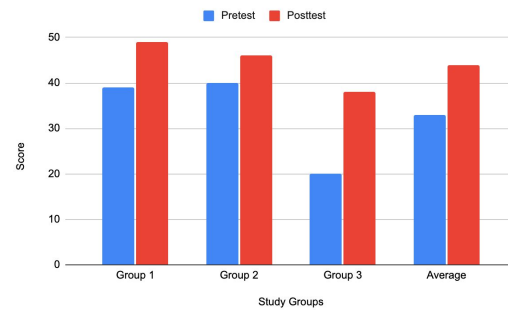
Results- Teacher Survey

Group 1

Group 2

Results- Teacher Survey

Group 3

Results- Zones of Regulation Staff Implementation Survey

Results SDQ and SPM-2

Pearson Correlations between SDQ and SPM-2

		SDQ			
		Total Difficulties		Prosocial	
		r	p value	r	p value
SPM-2	Total	0.703	< 0.001	-	-
	Social Participation	-	-	-0.729	< 0.001

SPM-2 Change from Pre to Posttest Among Groups

	Group 1 n=5	Group 2 n=8	Group 3 n=6	p value
		Average		
Total T-Score at Pretest	80.0	77.0	54.0	< 0.001**
Total T-Score Change	0.0	1.38	0.67	0.87
		Subscale Average T-Score Change		
Vision	-2.40	1.88	5.00	0.032**
Hearing	8.00	0.13	-3.00*	0.279
Planning	-5.40	-0.88	-8.00*	0.072
Social Participation	-2.20	-3.13	-3.33*	0.901

Note: Decrease in score indicates an improvement in sensory processing abilities.
*significant within group (p < 0.05)
**significant between groups (p < 0.05)

Teacher Interview Themes

5 Themes Emerged:

Theme 1: Disparity of Sensory Processing Knowledge

- Challenges with understanding and implementing sensory strategies

Theme 2: Sensory Tool and Zones of Regulation Use

Theme 3: Teacher's Appreciation of OT Support

Theme 4: Parent and Administration Support

Theme 5: Teacher Perspective Change

"So if it was just me in the classroom by myself, it was hard to be consistent sometimes because I'm like, okay, someone's really in the red zone but then there's 20 Other kids waiting for me or 15 other kids waiting for me"

"I have as you know, a very sensory overload classroom and and I found it very helpful with the the zones and the calming corner and just finding out more about my students like I've always done brain breaks that you know, like video brain breaks like dancing and music and just to know that Oh, with this group, those don't work"

"for my one student in particular, a lot of things are being set in place to help her, which I don't think would have happened, had we not met with you"

"So it made me think a lot more and be more active in showing my own zones as well"

Handwriting Tier 3 support

Self-Reflection

What is 1 intervention from each tier that you will take back to your school?

What are some ways that you will promote a tiered intervention implementation at your school?
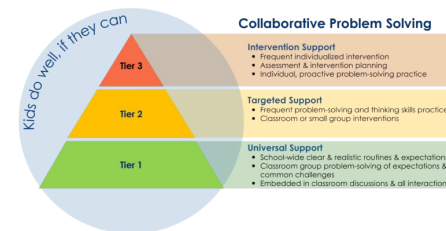
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Questions?