RETHINKING SPEECH SOUND INTERVENTION:
A TIER 2 MODEL FOR EARLY REMEDIATION, CASELOAD REDUCTION, AND PROFESSIONAL RENEWAL

Presented By : Linsey Jones, M.S. CCC-SLP

DISCLOSURE STATEMENT

Financial Disclosure: I own and manage SpeechLanguageLiteracyConnection.com. I consult and create educational resources related to this topic.

Non-Financial Disclosure: None.

SpeechLanguageLiteracyConnection.com

LEARNING OUTCOMES

By the end of this session, participants will be able to:

- Describe the components of a structured kindergarten Tier 2 speech sound intervention model.
- Articulate the research rationale for early, brief, targeted intervention in reducing long-term IEP caseloads.
- Differentiate which speech sound errors are highly responsive to Tier 2 remediation.
- Design a 6 week intervention cycle using data to guide entry, progress monitoring, and exit decisions.
- Integrate learning and efficiency principles into short, high-impact speech sound sessions.

QUICK PRE-CHECK

- **Type YES in the chat if...**

- **Your caseload has increased over the last 3-4 years.**
- **You feel like you are triaging instead of preventing.**
- **Work expectations have not been recalibrated to match caseload growth.**

SpeechLanguageLiteracyConnection.com

THE PROBLEM ISN'T YOU.
IT'S THE STRUCTURE.

- Caseloads have increased.
- Student profiles are more complex.
- Expectations haven't shifted.
- The traditional model doesn't scale.

SpeechLanguageLiteracyConnection.com

# THE REACTIVE SERVICE MODEL

- Referral → Evaluation → IEP → Extended Service

- When support begins only after qualification:
  - Intervention is delayed.
  - Errors are more entrenched.
  - Caseloads grow cumulatively.
  - This is a systems issue-not a clinician issue.

SpeechLanguageLiteracyConnection.com

REFLECTION

How many speech-only IEPs are you currently managing that feel like you could remediate faster without all the work that goes into the IEP process?

SO WHAT WOULD A SCALABLE MODEL LOOK LIKE?
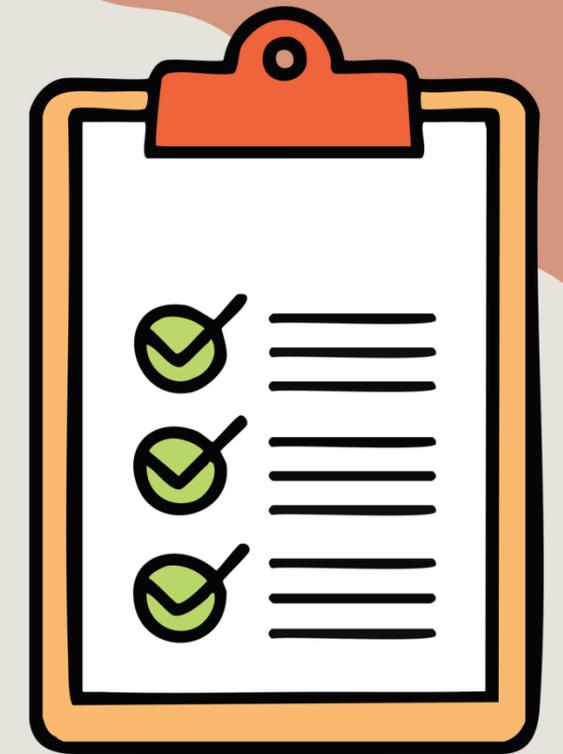
THE INTERVENTION MODEL

- **A structured, kindergarten-centered Tier 2 speech sound intervention model.**
- **Designed to:**
  - **Deliver brief, targeted instruction**
  - **Accelerate mastery of speech errors**
  - **Designed for full remediation-not maintenance**
  - **Reduce long-term, speech-only IEPs**

SpeechLanguageLiteracyConnection.com

THE PROGRAM ORIGIN

- **How the model began**
  - Caseload growth
  - High volume of mild–moderate speech errors
  - Need for earlier, structured intervention
- **Pilot: Structured Tier 2 speech model**
- **Parallel pilot: Structured phonemic awareness intervention**
  - → 35n State awarded grant for literacy programming

THE CASE FOR EARLY, STRUCTURED INTERVENTION

- **Research consistently shows:**
  - **Early, structured intervention produces stronger gains than delayed treatment.**
  - **Preschool and early elementary speech interventions demonstrate measurable improvement in accuracy and generalization.**
  - **Persistent speech sound disorders are associated with later literacy risk.**
  - **Earlier start and higher intensity predict greater accuracy gains.**

SpeechLanguageLiteracyConnection.com

THE TIER 2 PREVENTION FRAMEWORK

- **Early identification: Fall kindergarten speech screener**
- **Brief, high-efficiency cycles: 6-week, high-frequency sessions**
- **Targeted skill focus**
- **Developmentally appropriate, high-response errors**
- **Defined entry & exit criteria**
- **Time-limited, mastery-driven placement**
- **Ongoing progress monitoring**

REFLECTION

In your district, what speech sound errors typically trigger a speech referral/evaulation for kindergarten students?

THE PROGRAM: SCREENER

- **Universal kindergarten speech screener**
  - **16 items**
  - **1-2 minutes per student**
- **Simple scoring: Pass | Recheck | Refer for intervention**
- **Designed to identify:**
  - **Errors responsive to Tier 2**
  - **Patterns likely to require formal evaluation**
- **Most commonly flagged sounds:**
  - **K/G, S/Z, F/V, S-blends**

STUDENT SELECTION & SERVICE MODEL

- **Forming the intervention list**
  - Students identified through universal screener
  - Errors typical of IEP'd kindergarten students and highly responsive to intervention

- **Service format**
  - Individual sessions
  - 5-10 minutes
  - 2-3 times per week
  - 6-week cycles
- **Designed for:**
  - High-frequency practice
  - Rapid skill acquisition

SpeechLanguageLiteracyConnection.com

THE 6-WEEK INSTRUCTIONAL CYCLE

- **Week 0: Baseline**
  - Collect accuracy data on target sounds
  - Determine stimulability and cueing needs

- **Weeks 1-6: Targeted instruction**
  - 5-10 minute sessions, 2-3x/week
  - High-response practice
  - Immediate corrective feedback
  - Cumulative review

SpeechLanguageLiteracyConnection.com

PROGRESS MONITORING

- Conducted separately from instructional sessions
- Therapy builds skill. Progress monitoring measures it.
- Brief probe on target sounds
- No cueing or teaching
- Compared directly to initial data
- Data determines:
  - Exit | Continue | Refer
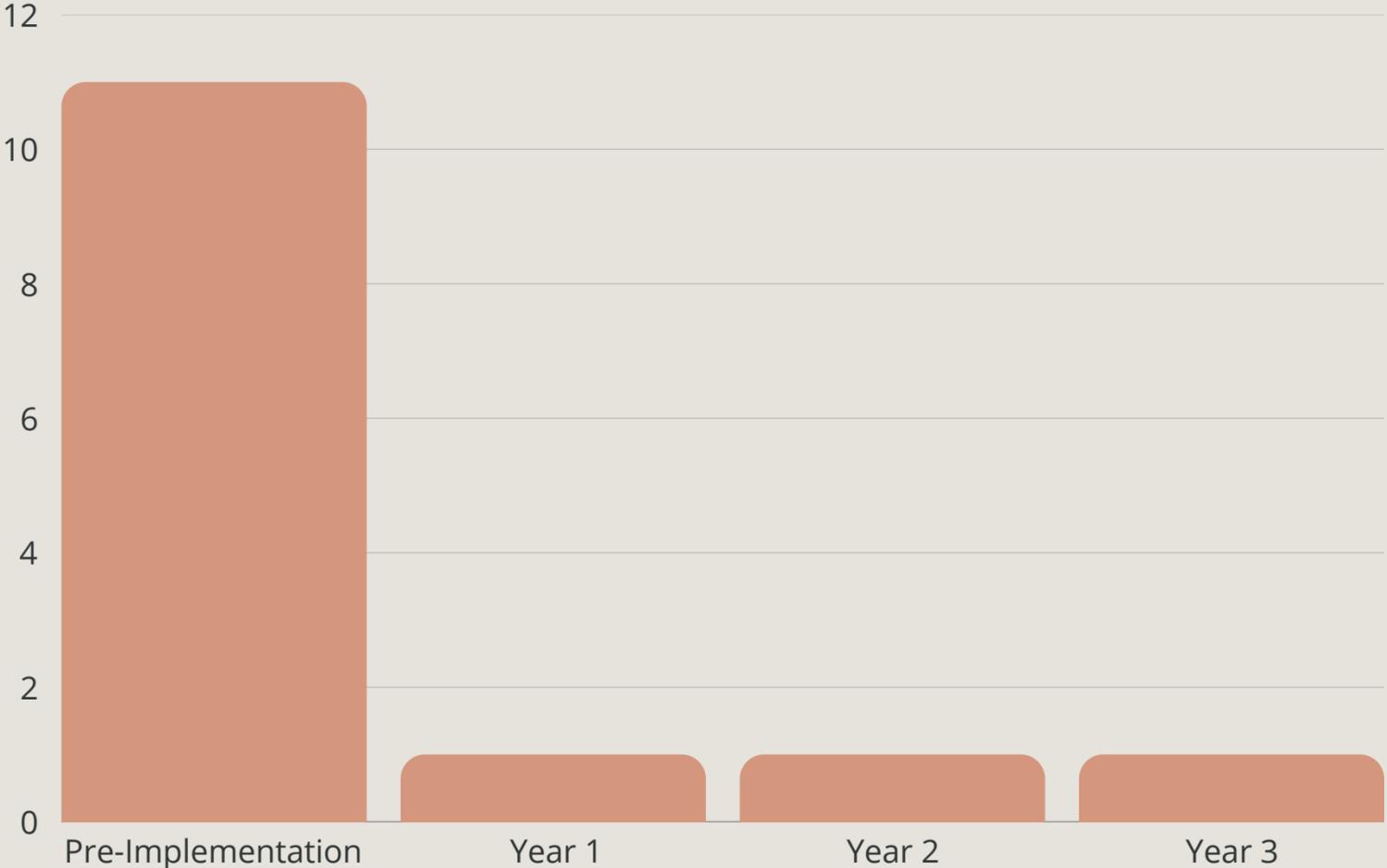
SpeechLanguageLiteracyConnection.com

KINDERGARTEN EVALUATIONS REDUCED AFTER TIER 2 IMPLEMENTATION

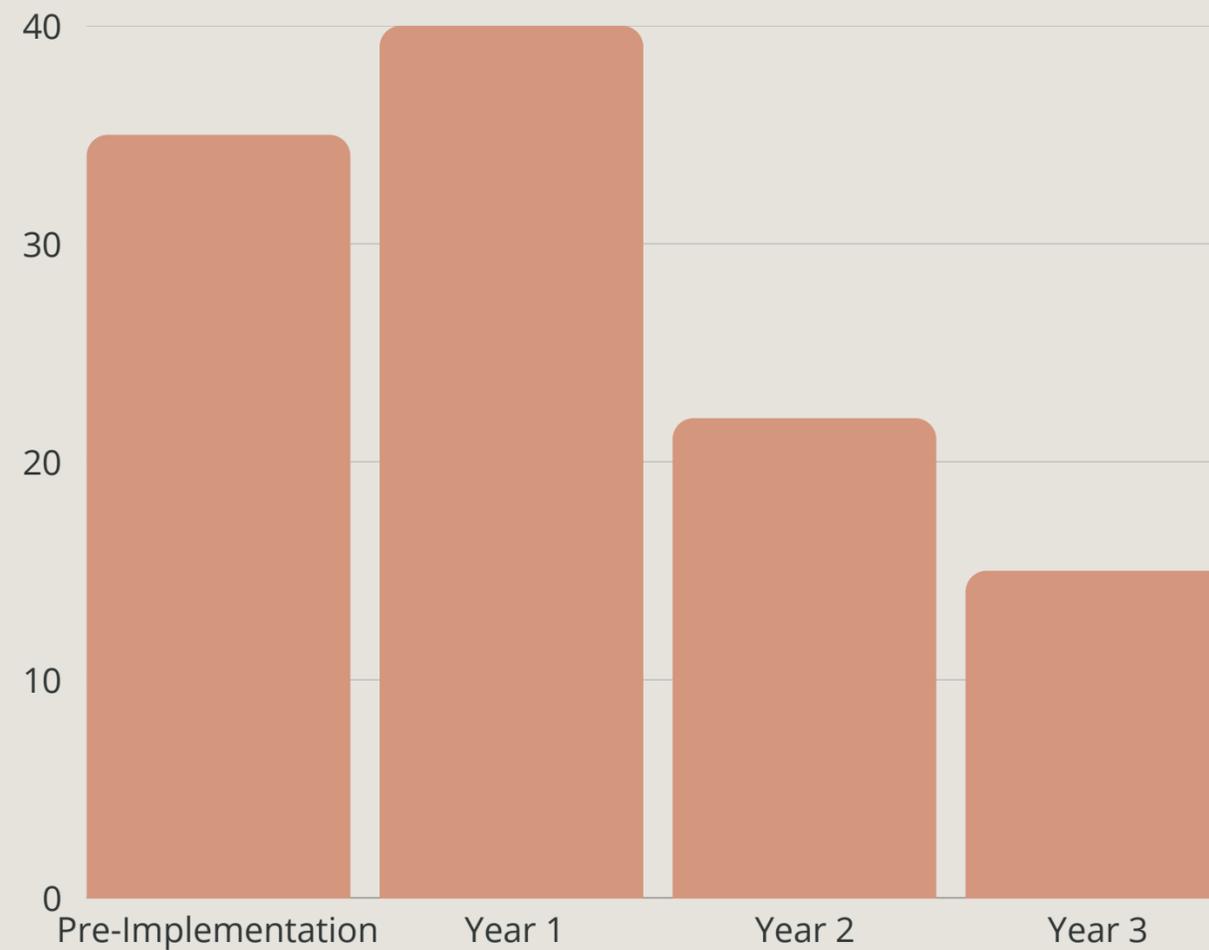**Initial evaluations for students not previously identified (all eligibility areas)**
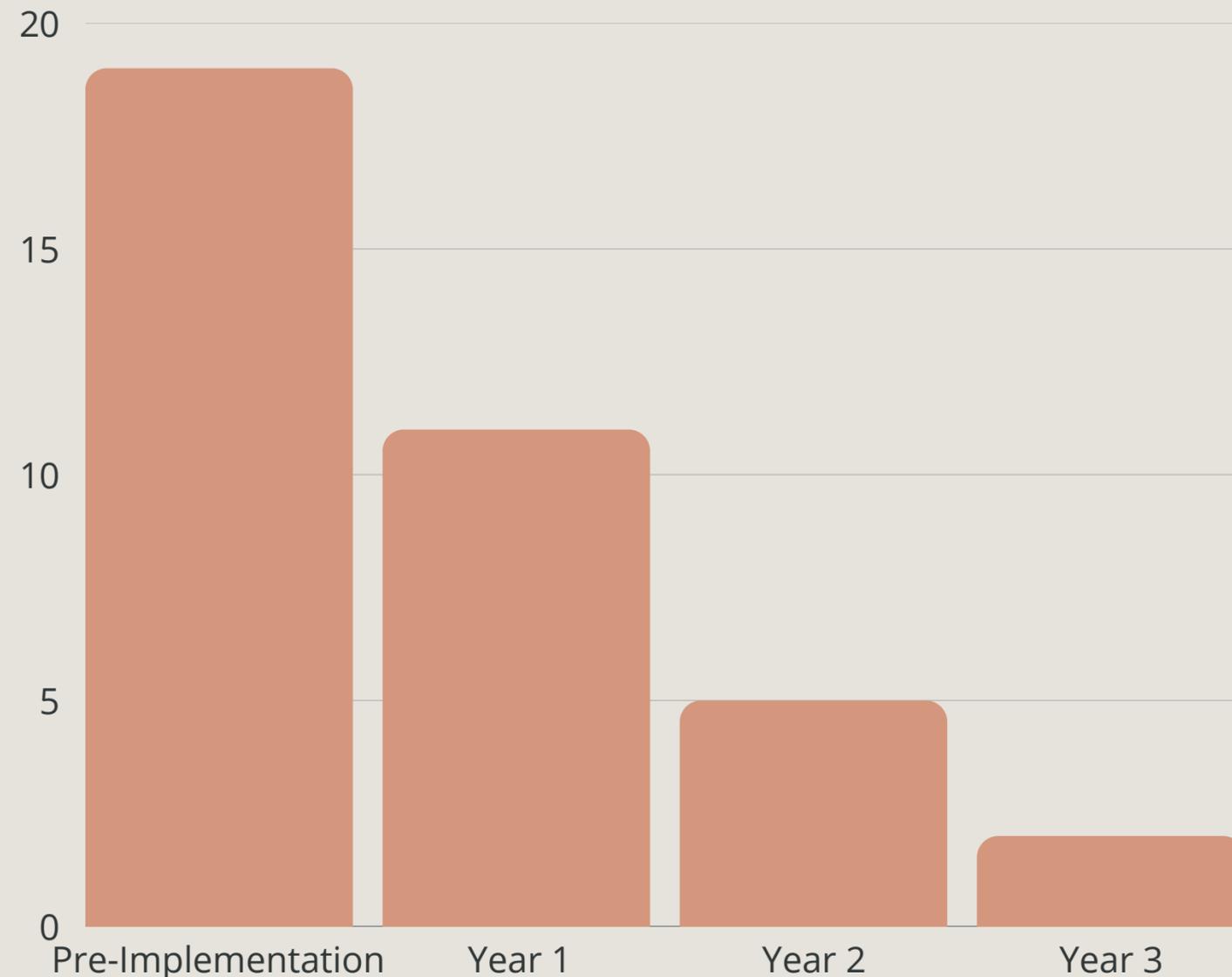
Proactive Tier 2 reduced the need for reactive evaluations.

	Pre-Implementation	Year 1	Year 2	Year 3

20
15
10
5
0

SpeechLanguageLiteracyConnection.com

KINDERGARTEN EVALUATIONS RESULTING IN SPEECH-SOUND-ONLY IEPS

SpeechLanguageLiteracyConnection.com

# KINDERGARTEN CASELOAD SIZE DECREASED AFTER TIER 2 IMPLEMENTATION

⬇ **62.5% reduction**
from Year 1 to Year 3

SpeechLanguageLiteracyConnection.com

ORIGIN OF 2025–26 KINDERGARTEN CASELOAD

- **Early Childhood Center-ECC (Previously Identified): 66.7%**
- **Move-In Students: 20%**
- **Initial Elementary Evaluations: 13.3%**

SpeechLanguageLiteracyConnection.com

Initial Evaluations
13.3%

Move In
20%

ECC
66.7%
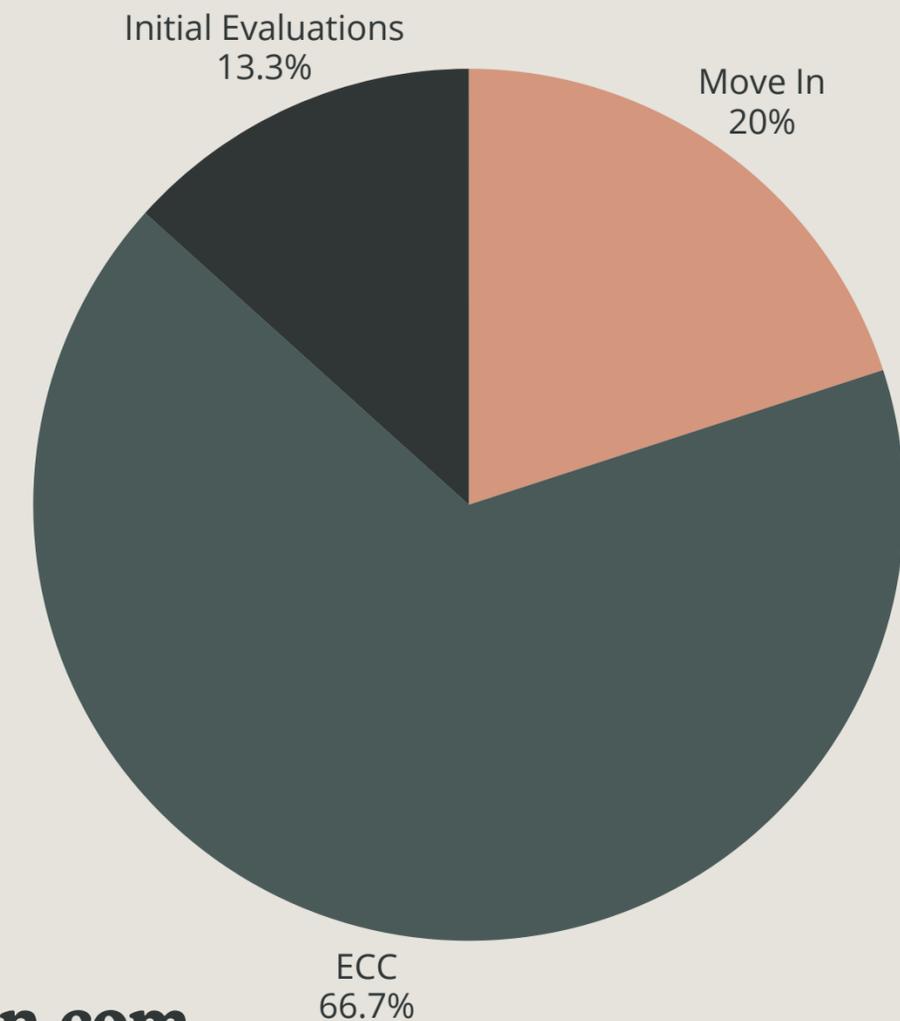
The Value of the Speech-Language Pathologist (SLP) in Schools: Prevention and Response to Intervention

ASHA American Speech-Language-Hearing Association

Preventative support involving school-based SLPs improves students' communication and literacy skills.

When compared with usual instruction, small-group support involving the SLP leads to improvements for...

Preschoolers	• **71%** of preschoolers improve phonemic awareness.[1] • Preschoolers identify initial sounds **4 times** more often.[1] • Preschoolers show **3 times** more improvement in story retelling, with skills maintained at 4-week follow-up.[2]
Elementary school students	Following just two hours of additional support... • **42%** fewer students with mild articulation errors require special education services.[3] Students who receive narrative instruction... • Demonstrate **5 times** more improvement in written narrative skills.[4] • Demonstrate **11 times** more improvement in oral narrative skills.[4] • Demonstrate **2 times** more improvement in narrative language production.[4] • Maintain gains in narrative skills at **5-month** follow-up.[4] Multilingual students who exhibit difficulties in language and literacy skills demonstrate improved outcomes, with... • **2 times** more improvement in narrative production, **5 times** more improvement in oral narratives, and **3 times** more

SpeechLanguageLiteracyConnection.com

REMEDIATION TIME: TIER 2 VS IEP

- **Age-matched. Sound-matched comparison:**
  - **Average time to full remediation:**
    - **Tier 2: ~2.5 hours**
    - **IEP peers: ~15.5 hours**
- **Tier 2 students achieved remediation in approximately 1/6 the time.**

REFLECTION

Which part of this iceberg takes up most of your week?

WHY THIS MODEL ACCELERATES REMEDIATION

- **1. Dedicated, high-efficiency intervention**
  - Short sessions, consistent scheduling, no missed cycles
- **2. Built on the Science of Learning**
  - High-success practice, immediate corrective feedback, repetition before generalization, mastery-driven progression
- **3. Explicit visual & articulatory feedback**
 - Clear placement cues, sound-symbol integration, reduced cognitive load

SpeechLanguageLiteracyConnection.com

FROM ACCURACY TO AUTOMATICITY TO GENERALIZATION

- **1. Accuracy builds motor plans**
  - **High-accuracy practice stabilizes correct speech motor patterns.**
  - **Motor learning research supports repetitive, feedback-rich practice early in acquisition.**
- **2. Massed practice supports acquisition**
  - **Early skill development benefits from frequent, concentrated practice.**
  - **Distributed practice strengthens long-term retention.**
- **3. Generalization must be engineered**
  - **Transfer does not occur automatically.**
  - **Structured opportunities for increasing complexity are required.**

SpeechLanguageLiteracyConnection.com

LEARNING PHASES
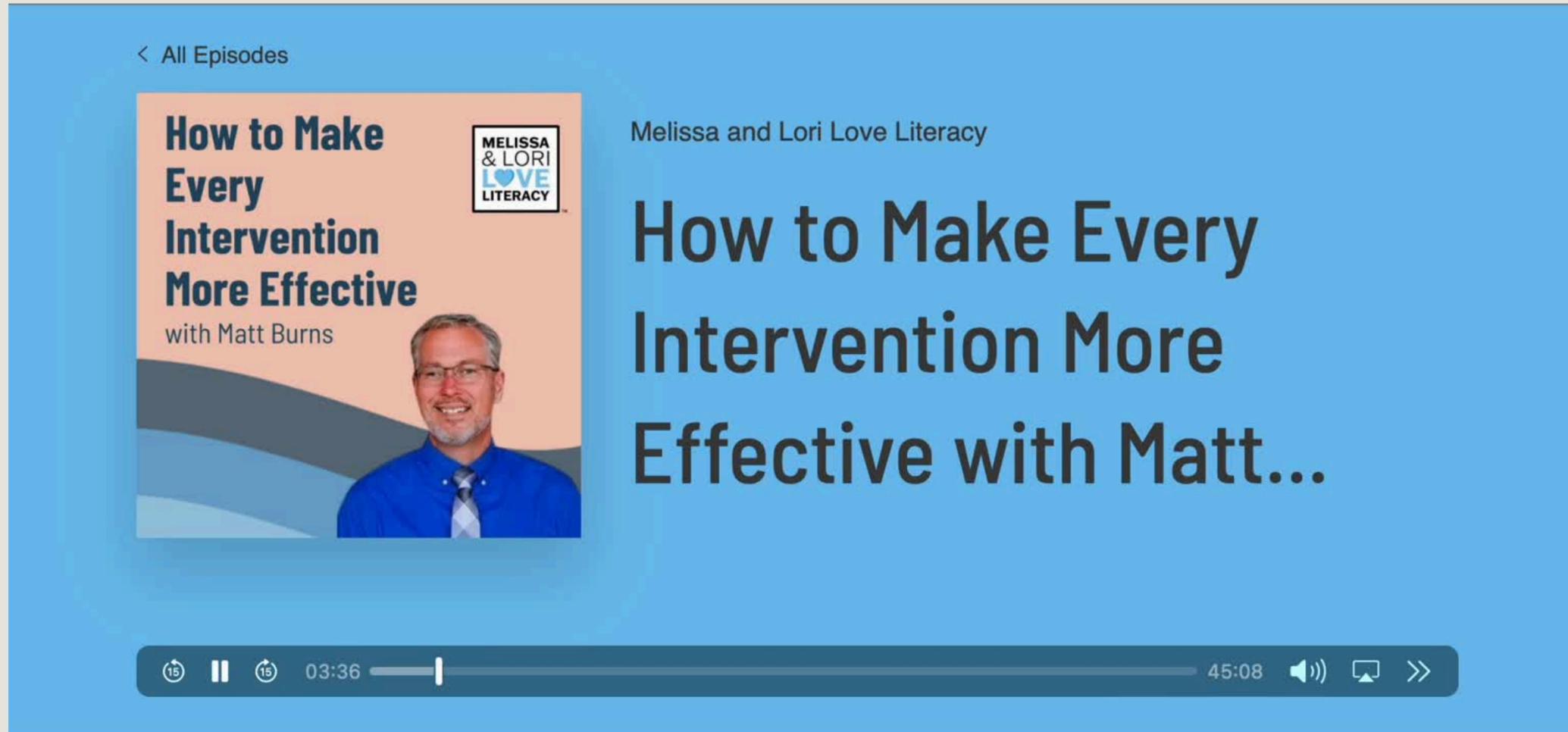
Dr. Matt Burns
Melissa and Lori Love Literacy Podcast

SpeechLanguageLiteracyConnection.com

WHY ACCURACY MUST COME FIRST

- Repeated inaccurate productions reinforce incorrect motor patterns.
- High error rates slow consolidation of stable speech representations.
- Early high-success practice strengthens phonological and motor encoding.
- Automaticity develops only after stability is achieved.

SpeechLanguageLiteracyConnection.com

PRODUCTIVE FAILURE

Dr. Matt Burns

Melissa and Lori Love Literacy Podcast

SpeechLanguageLiteracyConnection.com

ANATOMY OF A HIGH-IMPACT SESSION

- **Explicit visual placement cues (articulation visuals + modeling)**
- **High-success production practice (accuracy before speed)**
- **Anticipate and prevent error rehearsal**
- **Immediate, specific feedback**
- **Instruction only-no data collection during practice**
- **Word level → Structured conversation**

VISUAL PLACEMENT CUES

PROGRESS MONITORING: PROTECTING THE INTEGRITY OF THE CYCLE

Why It Matters

- Drives clear exit, continue, or refer decisions
- Prevents therapy from becoming maintenance
- Ensures instructional impact is measurable

How It's Structured

- Conducted separately from therapy sessions
- No cueing or teaching during probes
- Same conditions as baseline
- Scheduled, dedicated time

SpeechLanguageLiteracyConnection.com

CASE STUDY: WM (KINDERGARTEN)

- **Speech sound profile (Initial presentation):**
  - **Errors on: K/G**
  - **Errors on: S/Z**
  - **Errors on: R/S/L blends**
  - **Errors on: SH/ZH, CH/J**

- **Broad speech sound impact across:**
  - **Stops**
  - **Fricatives**
  - **Affricates**
  - **Blends**

SpeechLanguageLiteracyConnection.com

CASE STUDY: WM
RAPID REMEDIATION IN TIER 2

- **Total tier 2 instruction time: ~4.5 hours**
- **Full remediation of K/G and S-blends**
- **Systemic phonological change observed**
  - **Additional sounds remediated without direct targeting:**
    - **SH/ZH, CH/J, S/Z**

SpeechLanguageLiteracyConnection.com

CASE STUDY: AM (KINDERGARTEN)

- **Speech sound profile (Initial presentation):**
  - **Errors on S-blends**
  - **Errors on CH/J**
  - **Errors on SH/ZH**

- **Impact:**
  - **Reduced intelligibility in connected speech**
  - **Distortions and substitutions across fricatives and affricates**
  -

SpeechLanguageLiteracyConnection.com

AM: TIER 2 OUTCOMES

- **Target sounds:**
  - S-blends, SH/ZH, CH/J
- **Service delivery:**
  - 3x/week
  - 5-minute sessions
- **Total direct instruction time:**
  - ~290 minutes (≈ 4.8 hours)

- **Outcome:**
  - Full remediation of target sounds
  - Generalized to structured conversation

SpeechLanguageLiteracyConnection.com

WAIT AND SEE? A CASE EXAMPLE

- **Speech sound profile**
- **(Initial presentation):**
  - **Did not pass screener**
  - **Errors on: K/G and S-blends**
  - **Parents declined Tier 2 support**

- **One year later:**
  - **Did not pass screener again**
  - **Same error patterns**
  - **No spontaneous resolution**

WAIT AND SEE? A CASE EXAMPLE

- **Intervention**
  - **Just under 2.5 hours for full sound error remediation (155 minutes)**
  - **Time alone did not resolve the errors-structured intervention did.**

ETHICAL & PROFESSIONAL SAFEGUARDS

- Tier 2 is not a denial of services.
- It is an early intervention pathway.
- Students are:
  - Universally screened
  - Progress monitored with objective data
  - Provided time-limited, structured intervention

- Referral occurs when:
  - Minimal or no response to intervention
  - Errors persist beyond expectations
  - Co-occurring language or broader communication concerns are present
- Prevention does not replace evaluation-It informs it.

CASE STUDY: TIER 2 → EVALUATION → SHORTER IEP DURATION

- **Student referred by teacher (4th grade)**
- **Tier 2 intervention trial:**
  - **160 minutes of structured instruction**
- **Response:**
  - **Partial improvement**
  - **Referred for formal evaluation**

- **Impact of Tier 2 trial:**
  - **Foundational skills already established**
  - **Accelerated progress once on IEP**

- **Total therapy time to remediate /r/: ~6 hours**

SpeechLanguageLiteracyConnection.com

ETHICAL CONSIDERATIONS: STUDENT IMPACT

- **When early, structured intervention can remediate errors efficiently:**
  - **Students spend less time in long-term services**
  - **Students remain in classroom instruction**
  - **Students experience faster success**
  - **Access to effective, timely intervention supports equity.**
  - **Early support protects instructional time.**
  -

SpeechLanguageLiteracyConnection.com

PROFESSIONAL IMPACT

- Fewer speech-only evaluations
- Reduced kindergarten caseload size
- More time for students with complex communication needs
- Less maintenance therapy
- Increased clarity in service delivery
- Improved job satisfaction

Prevention shifts workload from reactive to strategic.

SpeechLanguageLiteracyConnection.com

REFLECTION

What would change in your job satisfaction if your speech-only caseload dropped by half?

SYSTEMS-LEVEL IMPACT

- **Stronger foundations in early grades**
- **Reduced long-term IEP duration**
- **Clearer referral pathways**

Prevention strengthens the entire system.

SUSTAINABLE OUTCOMES REQUIRE SUSTAINABLE SYSTEMS

- High-impact intervention cannot rely on overload.
- Prevention requires:
    - Structured models
    - Protected time
    - Clear roles

Systems must support the work.

SpeechLanguageLiteracyConnection.com

CONDITIONS FOR SUCCESSFUL IMPLEMENTATION

- **Administrative support for prevention-focused service delivery**
- **Consistent universal screening procedures**
- **Dedicated interventionist to maintain intensity and fidelity**
- **Reliable data tracking system to guide entry, progress, and exit**

KEY TAKEAWAYS

1. Many kindergarten speech sound errors respond quickly to early intervention
2. Prevention can reduce long-term speech-only IEPs
3. The Science of Learning matters
4. Short, high-frequency sessions accelerate learning
5. Prevention strengthens the entire system

SpeechLanguageLiteracyConnection.com

ACTION PLAN

Step 1: Start With Your Own Caseload

Step 2: Use Data to Start the Conversation

Step 3: Work Toward a Prevention Model

SpeechLanguageLiteracyConnection.com

THANK YOU!

Linsey Jones, M.S., CCC-SLP

SpeechLanguageLiteracyConnection.com

REFERENCES

Almost, D., & Rosenbaum, P. (1998). Effectiveness of speech intervention for phonological disorders: A randomized controlled trial. Developmental Medicine & Child Neurology, 40(5), 319–325.

Archer, A. L., & Hughes, C. A. (2011). Explicit instruction: Effective and efficient teaching. Guilford Press.
Baker, E. (2011). Evidence-based practice for children with speech sound disorders: Part 1 narrative review. Language, Speech, and Hearing Services in Schools, 42(2), 102–139.

Bootsma, J. M., Caljouw, S. R., Veldman, M. P., Maurits, N. M., & Hortobágyi, T. (2020). Failure to engage neural plasticity through practice of a high-difficulty task is accompanied by reduced motor skill retention in older adults. Neuroscience, 451, 22-35.

Bridger, E. K., & Mecklinger, A. (2014). Errorful and errorless learning: The impact of cue-target constraint in learning from errors. Memory & Cognition, 42(6), 898-911.

Cummings, A., Halliday, L. F., & Oates, J. (2019). Speech intervention outcomes associated with word lexicality and intervention intensity. Journal of Speech, Language, and Hearing Research, 62(4), 1052–1070.

SpeechLanguageLiteracyConnection.com

REFERENCES

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. Scientific Studies of Reading, 18(1), 5–21.

Joo, S. J., Tavabi, K., Caffarra, S., & Yeatman, J. D. (2021). Automaticity in the reading circuitry. Brain and Language, 214, 104906.

Karpicke, J. D., & Roediger, H. L. (2008). The critical importance of retrieval for learning. Psychological Science, 19(9), 966–968.

LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. Cognitive Psychology, 6(2), 293–323.

Lee, T. D., Eliasz, K. L., Gonzalez, D., Alguire, K., & Dhaliwal, C. (2016). On the role of error in motor learning. Journal of Motor Behavior, 48(2), 99-115.

SpeechLanguageLiteracyConnection.com

REFERENCES

Lewis, B. A., Freebairn, L. A., & Taylor, H. G. (2011). Academic outcomes in children with persistent speech sound disorders. Journal of Communication Disorders, 44(3), 255–268.

Mire, S. P., & Montgomery, J. K. (2009). Early intervening for students with speech sound disorders: Lessons from a school district. Communication Disorders Quarterly, 30(3), 155–166.

National Institute of Child Health and Human Development. (2000). Report of the National Reading Panel: Teaching children to read (NIH Publication No. 00-4769). U.S. Government Printing Office.

Wong, Y. T. Y., Yuen, H. K. H., Yam, T. Y. T., & Capio, C. M. (2026). A systematic review and meta-analysis of the effects of errorless motor learning on movement outcomes. Frontiers in Psychology (in press).

Wren, Y., Harding, S., Goldbart, J., & Roulstone, S. (2018). A systematic review and classification of interventions for speech sound disorder in preschool children. International Journal of Language & Communication Disorders, 53(5), 867–884.

SpeechLanguageLiteracyConnection.com