

Impact of Occupational Therapist and Teacher Collaboration on Handwriting Outcomes in the Classroom

Kimberly Duetsch, MS, OTR/L and Linda Okonsky, MS, OTR/L



Rationale

Using a Response to Intervention (RTI) framework including co-teaching, occupational therapists (OTs) can assist teachers in developing collaborative handwriting instruction distinct to the needs of children in their classrooms. This proactive, collaborative approach in designing, implementing, and adapting handwriting instruction leads to improved outcomes including legibility amongst children in primary grades and avoids unnecessary referrals for evaluations.

Study Objective

The study was completed in order to further understand how an **RTI model of collaboration** between an OT and teacher can positively impact handwriting outcomes in primary grades. This study also examined the ways an OT can embed strategies and activities into the general education curriculum that facilitate skill acquisition and provide measurable positive outcomes.

Methods and Demographics

- Convenience sampling of three classrooms (39 total students) in one elementary school with teachers who were interested in additional support with handwriting:
 1. Kindergarten (whole classroom instruction)
 2. First grade A (whole classroom instruction)
 3. First grade B (small group instruction)
- Instruction occurred 1x a week for 30 minutes for 12 weeks (unless interrupted due to teacher request/school activities).
- Utilized concepts/categories from Size Matters Handwriting Program[®] (tall, small, and falling) to determine order of letter instruction.
- Legibility was measured utilizing criteria from the ETCH[®] (Evaluation Tool of Children's Handwriting).

Conclusions

- Post-collaboration legibility improvements were demonstrated and most pronounced amongst all the kindergarten students. All but two first grade students demonstrated improvements.
- Collaboration with teachers to address handwriting concerns at the whole classroom and small group level reduced referrals to direct occupational therapy.

Action Plan

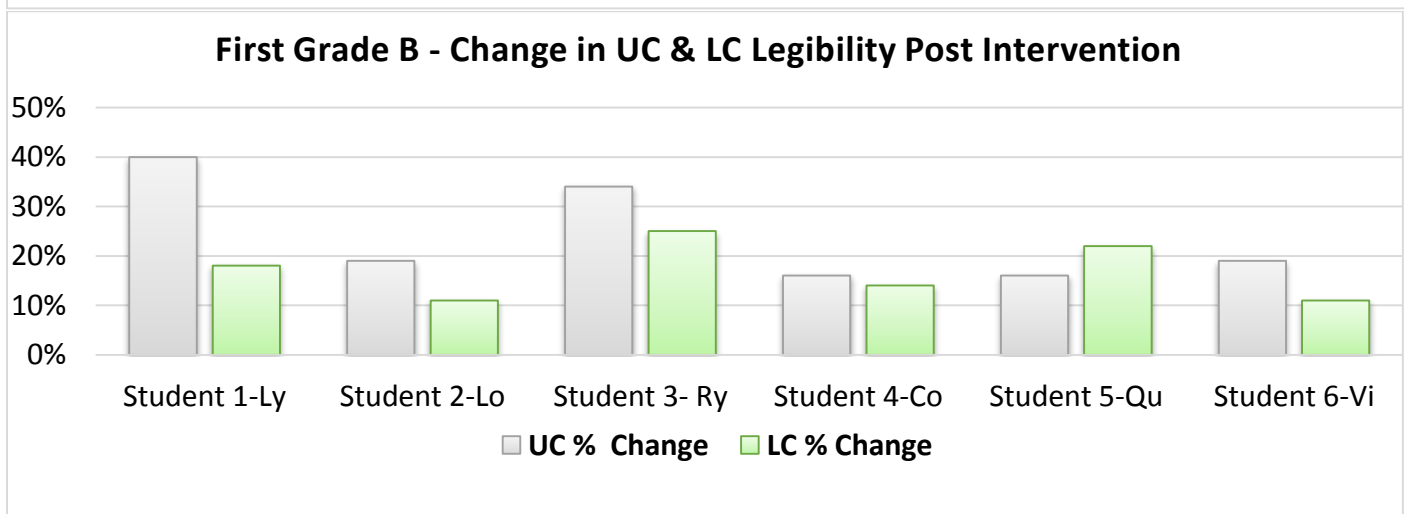
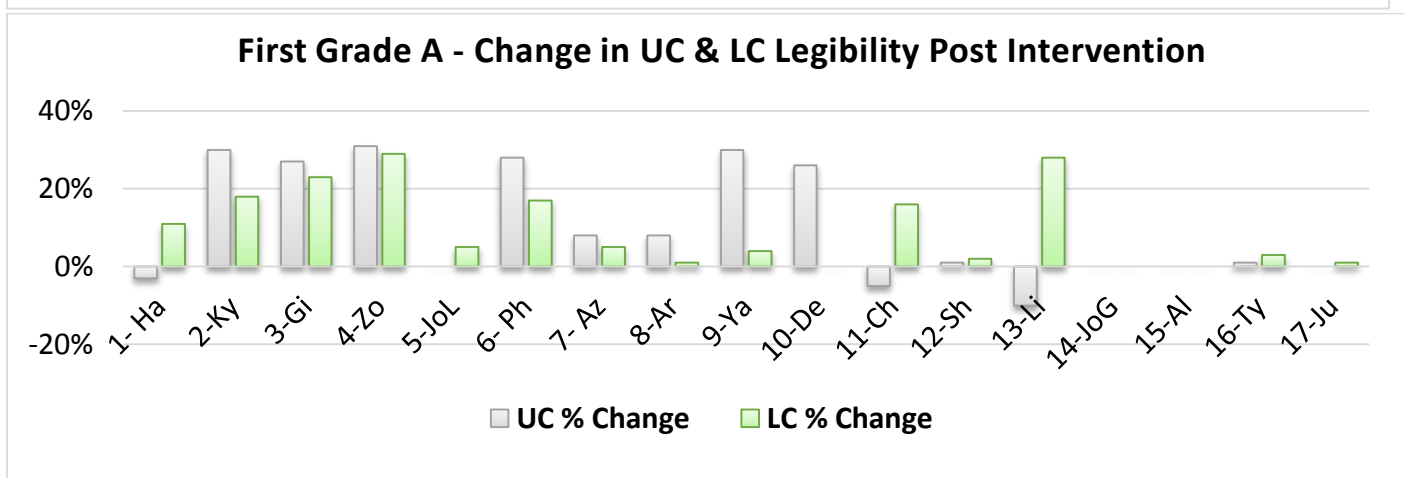
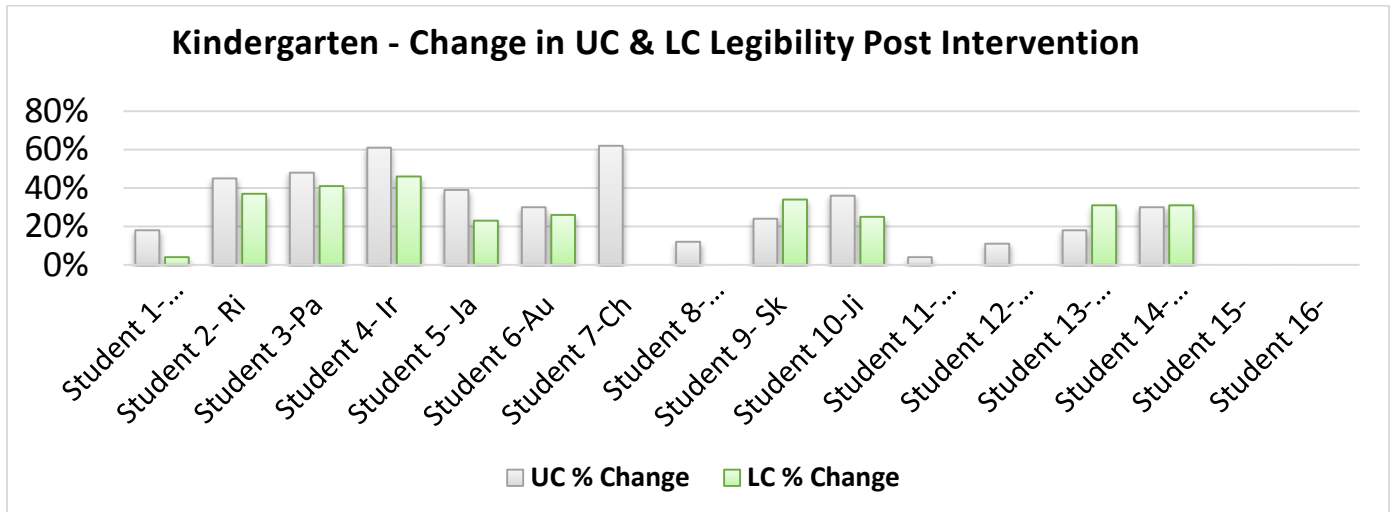
1. Comparison of classrooms with and without co-teaching
2. Comparison of results between classes that use a handwriting program and classes that do not use a program
3. Collaboration with district to streamline the co-teaching/RTI process
4. Utilization of baseline screenings for all kindergarten students in district
5. Incorporation of routine meetings to further evaluate the efficacy of the intervention and adjust as needed

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Results



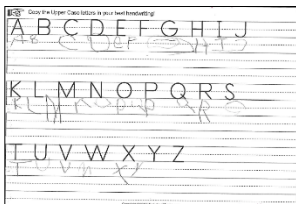
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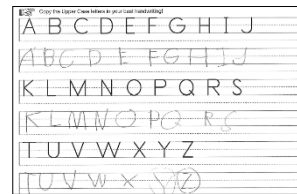
Outcome Measures

Classroom	# students	UC legibility change	LC legibility change	Referrals pre-intervention	Referrals post-intervention
Kindergarten	16	31%	30%	5	1
First Grade A	17	13%	12%	3	1
First Grade B	6	19%	11%	5	1

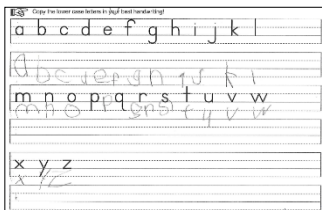
Student A: Upper Case Pre-Intervention



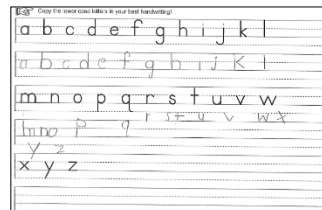
Student A: Upper Case Post-Intervention



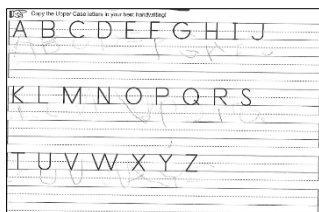
Student B: Lower Case Pre-Intervention



Student B: Lower Case Post-Intervention



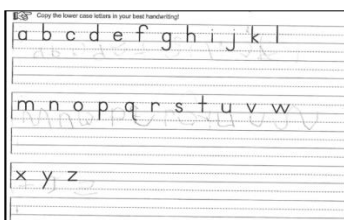
Student C: Upper Case Pre-Intervention



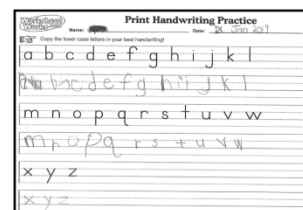
Student C: Upper Case Post-Intervention



Student C: Lower Case Pre-Intervention



Student C: Lower Case Post-Intervention



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Resources:

For more information on the Size Matter Handwriting Program, go to www.realotsolutions.com

For more information on the ETCH, go to www.therapro.com