



A Collaborative Handwriting Intervention Model

An Educational Course for School-Based Occupational Therapists

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SETTING & BACKGROUND

Setting

- Atlanta metro school system
- Eight school-based occupational therapist participants
- Kindergarten and first grade classrooms

Background

- Majority of school-based occupational therapists provide intervention outside the classroom.
- District recommends collaborative methods, but therapists do not have a model, or evidenced-based handwriting curriculum to use.
- Children do not receive daily handwriting instruction because teachers are unfamiliar with a handwriting curriculum (Asher, 2006 & Pfeiffer et al., 2015).
- Multiple students are referred to occupational therapy for handwriting delays (Case-Smith, 2002).

LITERATURE REVIEW

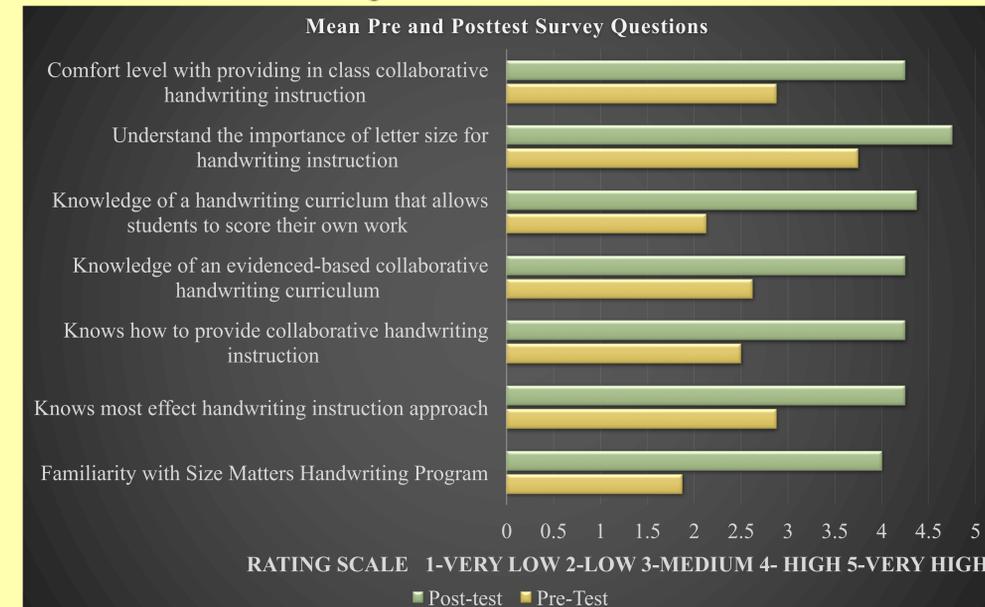
Critically appraised 14 quantitative and qualitative research articles published from 2002-2015

Themes that emerged from the literature

- Effectiveness of educational courses (Fosterlund et al., 2009)
- Current state of handwriting instruction in schools (Donica et al., 2012)
- Effective collaborative intervention(s), such as the *Size Matters Handwriting Program* and other handwriting curricula used to support handwriting instruction (Pfeiffer et al, 2015; Ohl et al., 2013; Campbell et al., 2012; Case-Smith et al., 2012)
- Positive outcomes for students with handwriting after OT collaboration with teachers (Case-Smith, Holland, Lane & White, 2012)

OUTCOMES

Quantitative Outcomes



* Statistically significant positive difference on each question between pre and posttest scores on the one sample paired *t*-test and the sign test *

Qualitative Outcome Themes

- * In-class collaboration improves teacher/therapist relationship
- * In-class collaboration for handwriting instruction improves student performance
- * Using *Size Matters* for collaborative instruction has several advantages

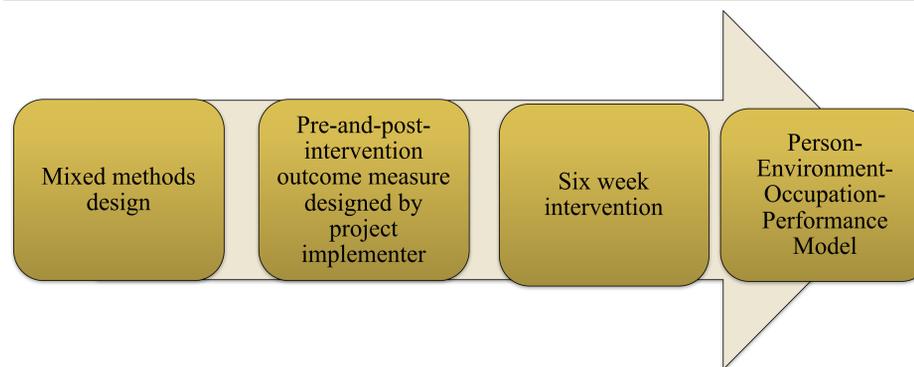
PIO QUESTION

Do school-based occupational therapists report a change in their ability to implement collaborative handwriting instruction after participation in an educational course?

SIGNIFICANCE TO OT

- Increase school-based OTs knowledge of implementing an evidenced-based handwriting program that can be used by general and special education teachers for all students.
- Improves the collaborative relationship between teachers and school-based OTs.
- Focuses the work of school-based OTs from individual intervention to intervention in the classroom, the natural context.
- Correlates with AOTA's *Centennial Vision* elements, expanding collaboration for success and the power to influence (AOTA, 2007).

DESIGN & IMPLEMENTATION



Week 1	<ul style="list-style-type: none"> • Group 2.5 hour in-service • Pre-testing • Power point covering the in-class collaboration, the <i>Size Matters Handwriting Program</i>, and strategies for in-class implementation
Weeks 2-5	<ul style="list-style-type: none"> • 30 minute weekly individual sessions with project implementer • Competency skills checklist on designing in class lesson using <i>Size Matters</i> concepts • 30 minute weekly in class collaborations with a kindergarten or 1st grade teacher using the <i>Size Matters</i>
Week 6	<ul style="list-style-type: none"> • Post testing • Collect weekly therapist in class experience documentation

SUMMARY

- An educational course is an effective tool that can be used to change knowledge, comfort level, and professional practice.
- School-based OTs' knowledge about *Size Matters* and collaborative handwriting instruction skills significantly improved after participation in the educational course.
- School-based OTs and teachers recognized the value in collaborating and using the *Size Matters Handwriting Program*.