



Creating a Co-Teaching Model for Handwriting in the 21st Century Classroom



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Abstract

A teacher and OT co-teaching team can improve the handwriting legibility of all students in the general education classroom and address handwriting issues when teachers lack training in handwriting instruction. With collaboration and digital instructional tools, all students are given the opportunity to master handwriting.

Introduction

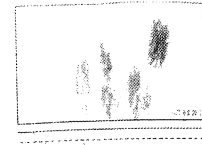
Research tells us that there is a clear link between handwriting and literacy development (Harman James, 2010), however many students struggle to write legibly. These students are often referred to OT for intervention when the real issue may be the lack of direct instruction. Students need 15 minutes of direct instruction a day using a consistent program within a school district to master handwriting. (Asher, 2006) According to Dr. Jane Case-Smith: "Although teachers agree that handwriting has important consequences for students, they also report that they have not been adequately prepared to teach handwriting." OT's can address these issues, as well as carry-over for IEP students, by facilitating a co-teaching model within the general education classroom. Occupational Therapists' collaboration with teachers can enhance all students learning experience. (Case-Smith, 2012) This approach can also decrease referrals for OT. Research also suggests that using digital tools improves pedagogy and the facilitation of student learning while supporting diverse learning styles through multi-sensory multimedia (Bui, 2009). When therapists collaborate with general education teachers while using digital tools, all students receive the benefit from direct instruction in handwriting, and are thereby guaranteed the best opportunity to master handwriting in a literacy environment.

Materials & Methods

Co-teaching was incorporated in two Kindergarten classrooms at Newport Elementary School in Newport, Ohio. This is an Appalachian area of southeastern Ohio with a free and reduced lunch rate of 49%. There are 36 children in these two classrooms. Eleven children had preschool experience and one student in each classroom came into Kindergarten with an IEP. The classroom used Zaner-Bloser Handwriting student books, and the "Handwriting eToolkit" digital tool. The students were given a variety of writing utensils to choose from including golf pencils, triangle short pencils, regular pencils, and fat pencils. Students were able to choose the pencil of their choice. Students with inefficient pencil grips were encouraged to use an 6-person easel/vertical surface to facilitate a 3-pt pencil grip. The occupational therapist provided direct services for 30 minutes a week in each classroom. The instruction included pencil grip, stroke development video models via interactive whiteboard, and music/ dancing videos. The teachers taught 2-4 additional letters per week. Teachers reinforced instruction and encouraged, through modeling, an efficient pencil grip that included the use of a vertical surface. The direct instruction time included a video model of each letter form in both upper and lower case. Teachers then incorporated the letterforms in other classroom activities such as journal writing or word wall copying.

Results

Of the 36 students, 11 students presented with ineffective pencil grips with improvement to an efficient grip noted in 10 students by the end of the second nine weeks. Students were able to print full sentences from a model with an average legibility of 77%. The mode of legibility was from 20% to 100%. Writing samples below were taken on October 8, 2014.



Conclusion

Direct instruction in handwriting provided by an occupational therapist and teacher co-teaching team, results in improved pencil grip, improved letter recognition, and improved letter legibility in all students including those with IEP's.

Sources & Citations

- Asher, A., (2006) Handwriting Instruction In Elementary Schools, *American Journal of Occupational Therapy*, 461-471, Vol. 60
- Arguelles, M. E., Hughes, M. T., & Schumm, J. S. (2000). Co-teaching: A different approach to inclusion. *Principal*, 79(4),48-51.
- Bui, V., (2009) Interactive Whiteboards Impact on Education. California State University, p.5.
- Case-Smith, J., Holland, T., & White, S.A., (2012) Effect of coteaching program for first graders: One-group pretest-posttest design. *American Journal of Occupational Therapy*, 66, 396-405.
- Harman James, K., (2010) Sensori-motor experience leads to changes in visual processing in the developing brain. *Developmental Science*, 279-288, Vol.13, Issue 2.

