

# Handwriting Fun at Educare-Indian Hill

## Michelle Huesca OTD Student– Creighton University

### BACKGROUND

Educare-Indian Hill is an Early Childhood Education center in the Omaha Public School District. The school is made up of 16 classrooms. Amongst those classrooms, there are infant rooms, which are kids from birth to 1 year old, toddlers from 1-2 year old, 2-3 year old and lastly preschool classroom is made up with kids 3-5 years of age. Infant and toddler rooms are composed of 8 students and preschool rooms are composed of 16 and 3 staff members. Indian Hill has a high population of Spanish speakers, both in the staff team and the children in the classrooms.

Through consultation with the school nurse, family engagement specialists and other staff members a focus on development milestones and handwriting were identified as high need are for this population.

It is important to master early handwriting skills in order to continue with the more complex handwriting skills children will see future grades (Schneck &Case-Smith, 2015). Writing development first occurs using visual form and space, to later create a kinesthetic input when writing (Schneck &Case-Smith, 2015). By working on finger manipulation, hand eye coordination etc., the children can incorporate them in other meaningful activities completed both in school and at home.

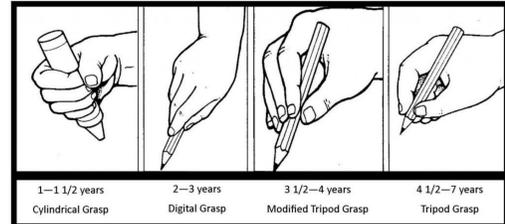


### PROGRAM DETAILS

After meeting with staff at Educare, completion of observations, and interventions, a handwriting program has been created to share with the teachers. Research shows that with a curriculum-based handwriting program, there is a chance to increase handwriting legibility (Engel et al., 2018). I also wanted to include materials that might be used at school and at home, like technology. With the increase of technology use at an early age, it would also be beneficial if parents and teacher use them in the school and at home to help promote learning. With the use of motor skill applications, children might be able to improve performance in school base activities and play (Axford et al., 2018). Ultimately the goal of the program is to improve and meet handwriting milestones while completing meaningful activities. This program will help the children at Educare for the years to come.

### FOCUSED QUESTION

How can the teachers better assist the children develop age appropriate handwriting skills based on typical development milestones?



### METHODS

The following steps were taken to create the handwriting program:

- ❖ Completed a 30-45 minutes interview with teachers and other staff members.
  - Administered a short survey to better understand their concerns.
- ❖ Completed observations in each classroom that had children with possible developmental delays.
  - Some observations were in the classroom and other were completed through the observation rooms available.
- ❖ Reviewed evidence on developmental stages of handwriting (e.g including grasping, pencil release, attention, etc).
- ❖ Completed in classroom intervention with kids on fine motor and gross motor skills.
  - Administered the BEERY VMI and completed the first 9 items with 4 children that will be going on to kindergarten.
- ❖ Researched useful handouts and created handouts for teachers and parents in English and Spanish including:
  - Grasping grip, finger manipulation, pencil grip.
  - Adaptive devices to use and improve handwriting skills.
  - The role of OT in school systems.
- ❖ Found and shared online resources both in English and Spanish on handwriting skills, fine/gross motor ideas for teachers and parents.
  - Learning Without Tears and their distance learning coursework.
  - Size Matter Handwriting Program teacher handout
  - Teacher blogs.
  - Parents blogs.
  - OT websites.
- ❖ Tried iPad apps and android friendly apps that focus on handwriting.
- ❖ Created a craft video for teachers and parents.
- ❖ Created presentation for teachers on what occupational therapist do at a school setting, as well as included activities to do in the classroom.

### RESULTS

With the gathered information the following handwriting program was completed:

#### First Phase: Completed before classes are in session

- ❖ Watch presentation on role of OT in school setting, handwriting development, fine and gross motor activities.
- ❖ Create an account on Learning Without Tears to become familiar with the website, as well as get the preschool readiness handout and other workbooks useful for lesson planning throughout the quarter/semester.
  - Choose 3-5 activities or lessons to use during the first quarter/semester.
- ❖ Get the teacher handout from the Size Matters Handwriting Program to choose 3-5 handwriting activities to complete throughout the quarter/semester.

#### Second Phase: Completed during quarter/semester

- ❖ Each week, choose 3 activities from the resources (e.g. handouts, websites, workbooks etc.) ideas given that focus on fine motor, gross motor, and handwriting skills.
- ❖ In the first two weeks, administer a pre-test to the children on handwriting skills.
  - Including: grasping of pencil, name writing, letter recognition, and legibility. Can also include handwriting assessments Learning Without Tears or Size Matters Program offers.
- ❖ Each week administer 2 lesson plans from workbooks. Could use the same activity as previous weeks to ensure the students master those concepts.
  - One can be done as a whole group or in smaller groups.
- ❖ Complete 1 fine motor activity each day.
- ❖ Include a crafting activity each week.
- ❖ Handwriting station twice a week, where students work one on one with a teacher on handwriting skills using iPad apps ( e.g. Dexteria, Ready to Print, Writing Wizard – Handwriting, ABC PreSchool Kids Tracing & Phonics Learning Game, etc.).



#### Third Phase: Completed at end of quarter/semester

- ❖ Administer a post-test to determine if the child has improved handwriting skill or determine which children need more one on one help.
- ❖ Choose new lesson plans from workbooks, new fine motor, gross motor, and handwriting activities to administer the following quarter/semester.
- ❖ Make any changes necessary to lesson plans or activities.

### BOTTOM LINE FOR OT

Occupational therapists have the knowledge and skill set to help children reach their handwriting milestones. One way occupational therapists help children meet handwriting milestones is by creating fun activities that focus on developing fine motor precision, hand-eye coordination, and in hand manipulation (Seo, 2018). Through the fun and play, children are developing skills that will be needed in handwriting, as well as other activities of daily living (ADLs)(Seo, 2018). Occupational therapists also assist by educating teachers on developmentally appropriate tools to support classroom performance and participation, as well help educate parents on what occupational therapy is and how it can help children in the school system (Majasic et al., 2015).

### REFERENCES

- Axford, C., Joosten, A. V., & Harris, C. (2018). iPad applications that required a range of motor skills promoted motor coordination in children commencing primary school. *Australian Occupational Therapy Journal*, 65(2), 146–155. <https://doi-org.cuhsl.creighton.edu/10.1111/1440-1630.12450>
- Engel, C., Lillie, K., Zurawski, S., & Travers, B. (2018). Curriculum-Based Handwriting Programs: A Systematic Review With Effect Sizes. *The American Journal of Occupational Therapy : Official Publication of the American Occupational Therapy Association*, 72(3), 7203205010p1-7203205010p8.
- Majasic, J., Benson, J., & Szucs, K. (2015). The Teacher–Occupational Therapist Relationship in School-Based Practice: Perspectives of the Teachers. *American Journal of Occupational Therapy*, 69(Supplement\_1), 6911505034p1.
- Schneck, C., & Case-Smith, J. (2015). Prewriting and Handwriting Skills. In Case-Smith, J and Clifford O'Brien J. (Eds.), *Occupational Therapy for Children and Adolescents (7th ed.)*, pp.498-559. St. Louis, MO, Mosby Inc.
- Seo, S. (2018). The effect of fine motor skills on handwriting legibility in preschool age children. *Journal of Physical Therapy Science*, 30(2), 324-327.
- Pictures retrieved from:  
1: <http://clipart-library.com/clipart/329382.htm>  
2: <https://www.otoutside.com/news/2019/3/20/my-favorite-handwriting-pencil-grips-and-tips>  
3: <http://clipart-library.com/clipart/370106.htm>