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#### Handwriting Acquisition through a Drawing Program

John Toffi University of the Pacific

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Toffi, John, "Handwriting Acquisition through a Drawing Program" (2023). Occupational Therapy Student Capstones. 25.

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# Handwriting Acquisition through a Drawing Program

By: John Toffi,

Advised by: Dr. Natalie Loera, Dr. Natalie Perkins

In Partnership with

### **Elk Grove Unified School District**





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# Background

- Children with handwriting difficulties can have a negative impact on their academic performance
- Occupational therapists have received an increased number of referrals for handwriting difficulties
- Occupational therapists can address handwriting difficulties with many programs and interventions, however there is a lack of research demonstrating which are most effective



(Cohen et al., 2018; Engel et al., 2018, Klein et al., 2021)



### Literature Review

#### Literature Review

- Themes
  - Different OT interventions for handwriting
  - Art and Drawing interventions
  - Letter formation strategies
- Gap in Literature
  - There is no research indicating drawing can impact handwriting



(Martino & Lape, 2020; Pillar & Torrez, 2019, Bernier et al., 2021; Durani, 2019; Ohl et al., 2013; Ghanamah et al., 2023; Choen et al., 2018; Maurer & Roberts, 2020)



### Needs Assessment

#### **Needs Assessment**

- To OTs and COTAs
- Common themes:
  - In favor of a drawing program
  - Many handwriting Programs are too difficult to tailor classroom-wide curriculum and need a program that educators can implement as well in classrooms
  - Need: Fun, motivating, and meaningful
  - What activities can students benefit from: Drawing





# Program Purpose



Please scan the QR code



 (DeFauw, 2015; Martino & Lape, 2020; Klein et al., 2021; Pillar & Torrez, 2019; Uddin, 2016)





# Program Purpose

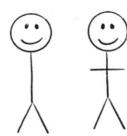
- Goal of Create to Write
  - Use evidence-based interventions
- How Create to Write is Structured
  - 2 Parts
- Prewriting Shapes
  - |, -, O, +, [,], \, X, \( \triangle \).
- What Create to Write Offers
  - Easy to follow directions
  - Posture, Hand placement, worksheet placement, pencil grip.

#### Create to Write

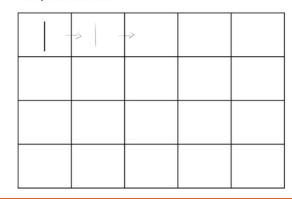
A Drawing Program for Handwriting Acquisition.







Repeat the line





# Guiding Theory

### Development of Handwriting Frame of Reference

- Is a theoretical framework that outlines the sequential progression of motor skills and cognitive processes involved in the acquisition of handwriting
- Considers the stages of prewriting skills, fine motor development, and letter formation
- This FOR identifies functions and dysfunctions in areas:
  - Posture, writing tools, grasp, and handwriting



(Roston, 2010)



### Outcome

- Deliverable Outcomes:
- Class of 2025 cohort presentation:
  - Provided feedback after skills lab
- EGUSD OTs and COTAs presentation:
  - Provided their thoughts and opinions
  - They loved Create to Write!
  - Inspiration?
- Drawing Program for EGUSD and UOP





## Impact

- Create to Write addresses the needs assessment
  - Positive Feedback from OTs, COTAs, professors, colleagues
- This program lacks concrete evidence
  - Future capstone project
  - Implement Create to Write
  - Potential research opportunities





### Discussion

- Occupational therapist are well equipped to address handwriting
- Effective collaboration for consistent support
- Can be shared or distributed to other OTs

(Martino & Lape, 2020; Pillar & Torrez, 2019)





# Acknowledgements

- Thank you to Dr. Loera
- Thank you to Dr. Perkins
- Thank you to Elk Grove Unified School District
- Thank you to the UOP Professors and staff
- Thank you to my classmates



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