



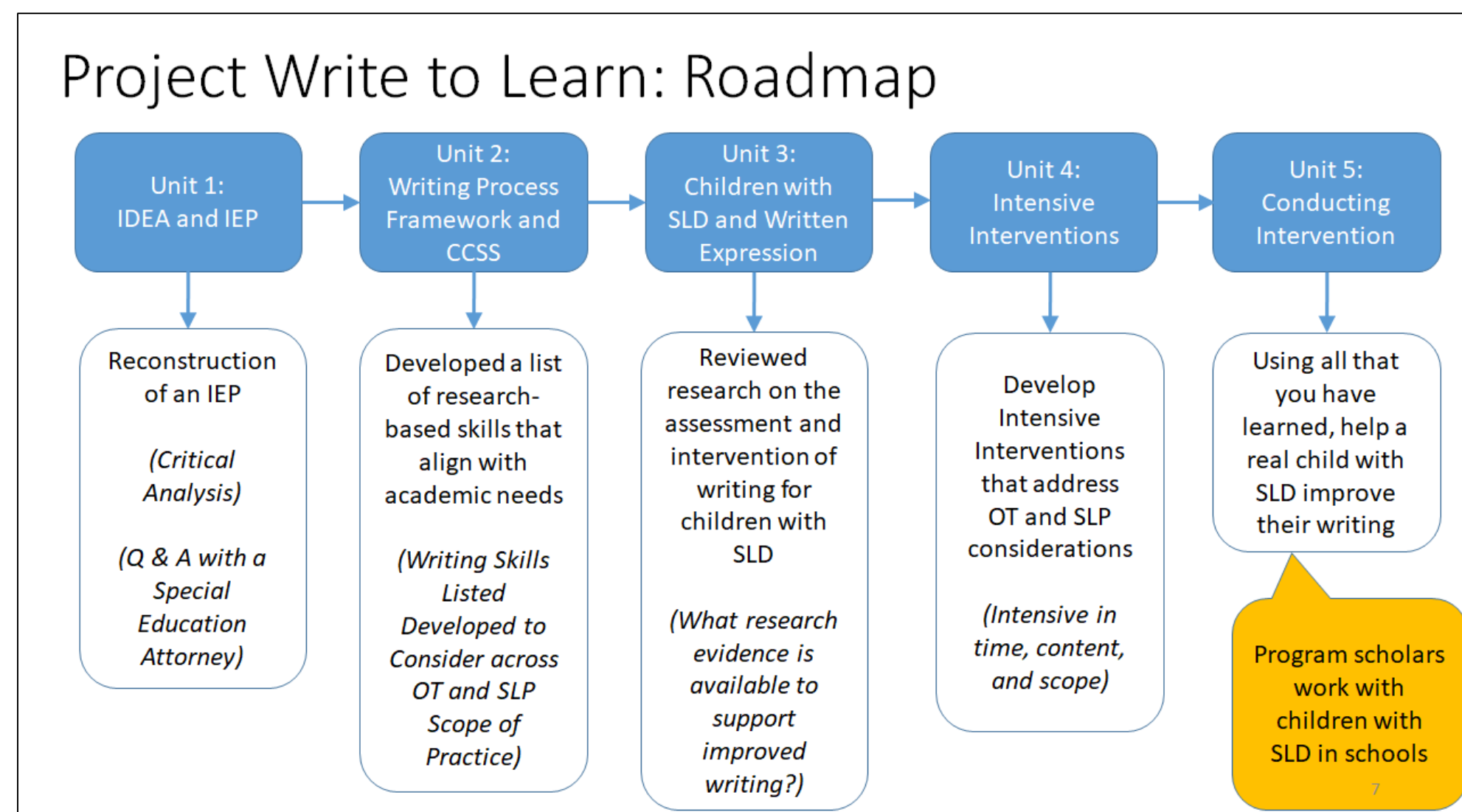
# Project Write to Learn: Strategies for Improving Writing in Children with Specific Learning Disabilities

Julia Lanuez, Caitlin Campbell, Leslie Anne Dessources, Linette Perez, Kelly Eckert, Tierney Hughes, Leah Ogrodnik, Anjali Patel, Vikram Dayalu, Karen Hoover, Anthony Koutsoftas, Ruth Segal  
Seton Hall University, NJ



## Program Description

Project Write to Learn (PWTL) is a program designed to facilitate interprofessional learning between graduate students in speech language pathology (SLP) and occupational therapy (OT) at Seton Hall University (SHU). Program Scholars completed five hands-on modules to learn about each profession's roles in the evaluation, planning, and treatment of children with Specific Learning Disabilities (SLD). Focal to the project is interprofessional cooperation, allowing for integration of skills and knowledge from different fields. The first four modules consisted of SLP and OT students working to understand the inner workings of special education in schools. During the fifth module, students worked in interprofessional dyads, consisting of one student from each discipline, to design and implement an intervention plan that addressed the visual, motor, language, and cognitive needs of writing for one or more students with SLD.



## Purpose

The purpose of this presentation is for program scholars and faculty to share their experiences as the first cohort to participate in this program. As a result of PWTL, program scholars (and faculty) have achieved the following learning outcomes:

- 1) Explain the importance of targeting writing in children with dyslexia, dysgraphia, and other language-based learning disabilities
- 2) Describe one strategy for improving writing in children receiving services under the IDEA qualifying category of SLD.
- 3) List one SLP and one OT target that can be included in writing interventions for children with SLD.

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- The authors have no other financial or nonfinancial relationships to disclose.

**Unit 1: Individuals with Disabilities Education Act (IDEA) and the Individualized Education Plan (IEP)**  
**Outcome:** Scholars worked in SLP-OT dyads to identify key parts of an (IEP). Plans were deconstructed to identify different sections of the IEP including writing goals. Plans were then re-written to better reflect a more holistic view of student goals and outcomes that incorporate skills targeted by both disciplines.

IEP Deconstruction: Program scholars will be given an IEP for a child receiving services under the qualifying category of Specific Learning Disabilities who presents with written expression deficits for analysis. Program scholars will work in small interdisciplinary teams to deconstruct the IEP by connecting each component with the legal mandates set forth by the N.J. Department of Education. Program scholars will rewrite the IEP to address goals while accounting for the provision of integrated services by OT and SLP providers to provide individualized, high intensity services.	
IEP Deconstruction Present level of education performance (PLF&F, PLAF, PLEP)	<ul style="list-style-type: none"><li>• Reading in reading, weaknesses in reading comprehension, main idea recognition, and questions that are more inferential. When reading at grade level, struggles with recalling facts, making assignments difficult for him, even when prompted by teachers and working in a small group. A weakness is expanding on his ideas using descriptive language and strong vocabulary words.</li><li>• Math struggles with multi-step open-ended questions, works at a slow pace when working independently. Very often, independent work is done in a small group so that things can be read to him.</li><li>• Science, social studies, health: takes a long time to look for answers in his textbooks. Although it takes awhile, he is usually able to find the correct answer, however, his pace is slow and interferes with his work completion.</li><li>• Speech/Language: Deficits in receptive and expressive language skills. Requires additional time to process and respond to "wh" questions, and has difficulty with word finding and language organization when responding to questions or retelling stories or relating past</li></ul>

**Unit 2: Writing Process Framework and the Common Core State Standards Outcome:** Program Scholars worked in their SLP/OT dyads to create a list of skills needed for writing success and aligned with the CCSS. for students in grades 1 through 4. Under each standard is a list of requisite motor, visual, language, and cognitive skills needed to achieve the writing standard.

<b>Skill List:</b>  The following list of skills has been defined with a 4th grade child in mind, and linked to the 4th grade CCSS Language and Writing standards. What follows listed next to the cognitive, linguistic, and visual skill heading is the reasoning behind why the skill set aligns with all language and writing standards. It is not accurate to simply cite one standard next to one specific skill sub-section, as the skills are needed as a whole in order for the child to gain comprehension of, and be able to efficiently use, the skills as the standards demand.
<ul style="list-style-type: none"><li>• <b>Visual perceptual skills:</b> skills required for the process of reception and cognition of visual stimuli. A child must have adequate visual perceptual skills to efficiently complete reading and writing tasks. How a child processes information when it comes to understanding the language they come across visually (written in a text, on the board, as directions on a sheet). If they cannot process this incoming visual information, the student will not be able to comprehend and then apply any of the knowledge related to the CCSS standards referenced in this document.<ul style="list-style-type: none"><li>◦ <b>Visual Discrimination:</b> ability to detect detail differences and distinctive features of a visual stimulus and distinguish from other visual stimuli.</li><li>◦ <b>Visual Attention:</b> ability to attend to visual stimuli that involves alertness, selective attention, vigilance, and divided attention. Visual attention is required for the formation of long-term memories.</li><li>◦ <b>Form Constancy</b> (Form Discrimination): The ability to see a form in various environments, positions, and sizes, and still be able to find it. This skill is required for children to identify letters regardless if they are written in cursive, manuscript, typed, uppercase, lowercase, or italicized.</li><li>◦ <b>Figure Ground</b> (Foreground-Background Differentiation): The ability to focus on a selected target and find it in a conglomerated ground; ability to differentiate between foreground, background, forms, and objects. This skill is needed for reading and handwriting, as a child must be able to block out other visual stimuli and focus on a certain word or words on a page when reading and/or writing.</li><li>◦ <b>Position in space:</b> ability to recognize the positionings of objects in relation to other forms or objects; provides awareness of an object's position and orientation. This skill is critical for understanding directional language components (up, down, in front of, behind, between, left, right) and the ability to differentiate between letters and sequences of letters in words or sentences. This skill is critical for handwriting, as it allows the child to determine how to place letters equal</li></ul></li></ul>

## Outcome Data

**Unit 3: Specific Learning Disability (SLD) and Written Expression Outcome:** Program scholars reviewed current research pertaining to writing assessment or intervention for children that would be classified as SLD. A list of best-practice assessments and interventions was created through the collaborative efforts of all student members of the project. Domains included: language, motor, visual, and cognitive as they relate to writing in children with SLD.

Resources for Intervention					
	Diagnostic criteria	Cognitive	Linguistic	Sensory	Motor
Specific language impairment (SLI)	Rule out other comorbid disabilities that could cause language impairments; standardized testing will be required to do this.	(Garcia, J. & Caso, A. M., 2004) (Tormannen, 2012) (Paz, 2001) (Berninger et al, 2017) (Saddler & Asaro-Saddler, 2012) (Joffe, Cain, and Maric, 2007)	(Garcia, J. & Caso, A. M., 2004) (Butler, K. G. & Sullivan, E. R., 2001) (Berninger et al 2015) (Jung, McMaster, & Delmas, 2016) (Rouhani et al 2016) (Wolf & Segal 1999) (Saddler & Asaro-Saddler, 2012) (Joffe, Cain, and Maric, 2007) (Berninger & Wolf, 2009)	(Tormannen, 2012) (Paz, 2001) (Saddler & Asaro-Saddler, 2012)	(Berninger et al 2015) (Paz, 2001) (Nicola & Watter, 2016) (Saddler & Asaro-Saddler, 2012) (Tanimoto, Thompson, Berninger, Nagy, & Abbott, 2015) (Saddler & Asaro-Saddler, 2012)

**Unit 4: Intensive Intervention Service Delivery Outcome:** Program scholars engaged in a multi-disciplinary discussion following completion of selected online training modules from the National Center for Intensive Interventions. The round-table discussion fostered deeper understanding of the commonalities across each discipline and intervention approaches used in each profession.

<ul style="list-style-type: none"><li>• <b>Macro rules for summarizing:</b> have to decide what is important and what is not, how to bring in information to be concise, have to combine ideas and give weight to them<ul style="list-style-type: none"><li>◦ Summarizing results in a jump in comprehension<ul style="list-style-type: none"><li>▪ Example: summarizing (grade 10)<ul style="list-style-type: none"><li>• Delete material that is unimportant</li><li>• Delete material that is repetitive</li><li>• Substitute a superordinate term for a subordinate one</li><li>• Select a topic sentence</li><li>• If no topic sentence, invent one</li></ul></li><li>• *students were taught to underline and cross out information with different colors. Summary writing was modeled and explained</li></ul></li></ul></li><li>• <b>Creating a pleasant writing experience</b><ul style="list-style-type: none"><li>◦ Particularly important to allow students to take risks</li><li>◦ Their work and effort is appreciated and writing is valued</li><li>◦ Data for this recommendation comes from studies on really effective literacy teachers<ul style="list-style-type: none"><li>▪ These teachers had about a 2 year gain in 1 year for kids in terms of reading and writing</li></ul></li><li>◦ One thing that was consistent among them was applying the first four principles that were talked about ( write, support, teach, connect)</li><li>◦ They also made effort to make sure an environment was created that allowed kids to succeed</li><li>◦ Some of the action steps that did this:<ul style="list-style-type: none"><li>▪ Teachers should participate as members of the community by writing and sharing their writing (they acted as writers, active members of community-wrote, shared and asked for feedback)</li><li>▪ Give students writing choices (some of the time- choice can lead to greater motivation)<ul style="list-style-type: none"><li>• Example: student asks to make small break to assignment and you know it is within the ballpark of what you want</li><li>• Allowing the change- likely more motivation and effort to do assignment</li></ul></li><li>▪ Praise students efforts and accomplishments</li><li>• Praise may be more powerful than constructive feedback. Always start with something you like when giving feedback.</li></ul></li><li>◦ Write for real purposes<ul style="list-style-type: none"><li>▪ With a real audience as often as possible</li></ul></li><li>◦ Publish student's writing, and extend the community beyond the classroom<ul style="list-style-type: none"><li>• Little kids- may be on board, hallway</li><li>• Older kids- anthologies/competitions</li></ul></li><li>• Set realistic but challenging goals for students</li></ul></li></ul>
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**Unit 5: Implementing Intensive Intervention for Children with Writing Needs:** Program scholars worked in their SLP-OT dyads to develop and conduct a four-week intensive intervention for a student with SLD who has writing needs. To do so, program scholars implemented a pre- and post- assessment plan and a four part intervention plan. Interventions focused on motor, language, visual, and cognitive deficits and areas of instruction for the student(s) involved. Progress monitoring data allowed for interprofessional collaboration throughout the intervention.

### COPS Editing Strategy

- +Have I capitalized the first the first word?
- +How is the overall appearance?
- +Have I used punctuation correctly?
- +Do the words look like they are spelled right?
- +Sound check out?
- +Can I use a dictionary?

I like to play house

I like to play

house.

You can come in too!

You can come in

too!

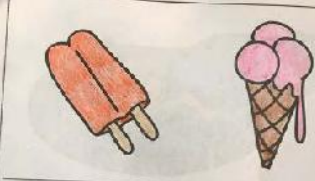
My sister is inside

My sister's house.

NAME \_\_\_\_\_

DATE \_\_\_\_\_

SCORE \_\_\_\_\_



ice cream  
popsicles  
We eat ice cream  
and popsicles.  
I like to make up my  
own popsicles. You can too!


### PLEASE Checklist

- Pick a topic
- List ideas to include
- Evaluate to see if the list is complete
- Activate the paragraph by constructing a topic sentence
- Supply sentences that support the paragraph
- End with a concluding sentence

### OPINION

#### Must See!

Think about the best movie you have ever seen. What did you like about it? You are going to write to review for this movie. Write one paragraph telling your friends why they MUST see this movie!



#### Brainstorm

Don't Forget to Include:

- A topic sentence
- A topic sentence to support your paragraph
- A conclusion sentence at the end

	Average Child Coverage	Spelling Accuracy	Percentage of Different Words	Mechanical Accuracy	Word Spacing Accuracy	Line Approximation Accuracy
Pre-Assessment	3/4	72%	72% (SDW=16)	0%	56%	\$19%
Post-Assessment	3.6/4	89.6%	62% (SDW= 14)	56%	70%	\$3.7%

## Program Evaluation

Project Write to Learn promoted interprofessional relationships and collaboration that ultimately yielded positive results for the 8 program scholars who participated in the first year of the project.

IPE Outcome Data; Year 1	Pre	Post
Readiness for Interprofessional Learning Scale (RIPLS; 2005)	4.26 (1.30)	4.94 (0.23)

Future directions for PWTL include: Expand to more schools; Focus on working within inclusion classrooms that house children with SLD; Increase time for Unit 5; Improve progress monitoring data procedures for children who participate in Unit 5 interventions.

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- Correspondence about this project should be directed to: [anthony.koutsoftas@shu.edu](mailto:anthony.koutsoftas@shu.edu)