

Project Write to Learn (PWTL): Resource Manual

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Project Write to Learn (PWTL) – Resource Manual

Introduction

Writing is an important instructional outcome for schoolchildren and it is especially challenging for children receiving special education services under the IDEA qualifying category of specific learning disability (SLD). Children who qualify for special education services under the category of SLD include those with dyslexia, dysgraphia, language-based learning disabilities, developmental language disorders, or developmental coordination disorders. Children with SLD are the largest proportion (35%) of children receiving special education services through the IDEA program (Kena et al. 2016). An important academic outcome for these children is the ability to write, and research indicates that children with SLD are on average one standard deviation below typically developing peers across 53 studies (Graham et al. 2017). Therefore, written expression is an important academic outcome for children with SLD due to the cognitive, language, graphomotor, visual perception, and sensory skills needed to engage in the writing process (Ritchey et al. 2016). Given the complex orchestration of these skills needed for writing (Garcia & Fidalgo, 2008) and the importance of writing for academic success as outlined by the Common Core State Standards (CCSS; 2012), written expression is considered a priority for children with SLD. Children with SLD are a heterogeneous group and can demonstrate difficulties with one or more writing processes, with great variation across individual learning profiles (e.g., Dockrell et al. 2015; Koutsoftas, 2016). Due to their shared practice roles related to written expression, occupational therapy (OT) and speech language pathology (SLP) professionals can effectively collaborate as a means of improving academic outcomes for children with SLD. Written expression is considered within the scope of practice for both professions (AOTA, 2017; ASHA, 2001) and so lends itself well to interprofessional practice.

With all of this in mind, Project Write to Learn (PWTL) was developed. PWTL was a federally funded Office of Special Education Programs (OSEP) personnel training grant that provides graduate students in OT and SLP shared coursework, group assignments, and coordinated clinical experiences that lead to developing intervention protocols to improve writing in children with SLD.

This resource manual is an artifact of the project and includes the key ingredients (via tables and figures) needed to implement the PWTL curriculum. Of course, adaptations must be made to reflect innovations in research and modifications to the world, such as a global pandemic, which did indeed interrupt the last two years of the project. Nevertheless, we persisted and were able to adapt to the new digital world and complete the curriculum and activities described in this resource manual through remote platforms. The PWTL website includes presentations reporting these adaptations (<https://blogs.shu.edu/projectwritetolearn/>). As we continue to publish about PWTL we will update the website, so check back.

The conceptual framework used to develop PWTL is included in Figure 1 and can be used to consider how two different disciplines working in schools can bring together skills toward improving writing outcomes in elementary school children. From this concept, we developed three program goals and eight learning competencies (see Table 1) used to develop the curriculum (see Table 2). A visual depiction of the curriculum, termed a curriculum road map, is

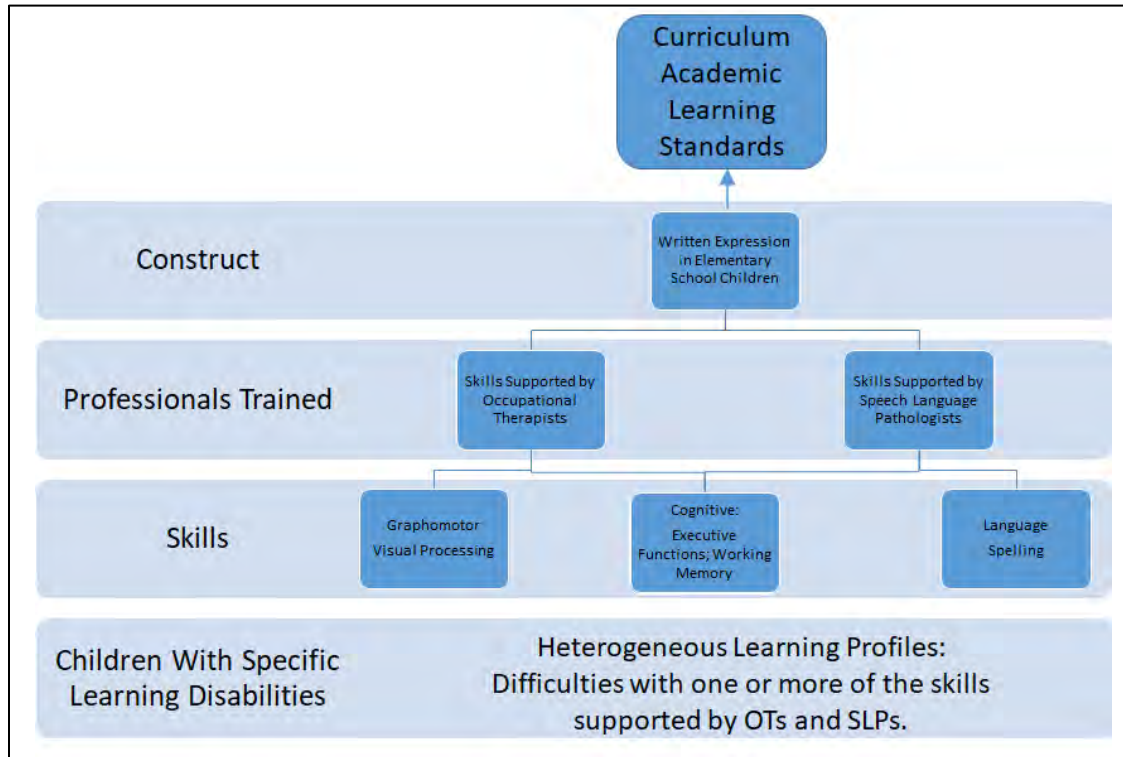


included in Figure 2. In addition to the references directly following this introduction, used to inform the conceptual framework of the study, there are additional references we found helpful in developing PWTL.

If you have any questions or would like to provide feedback on this resource manual, please contact Dr. Anthony Koutsoftas (anthony.koutsoftas@shu.edu).

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Figure 1. Conceptual Framework for Project Write to Learn (PWTL)

At the base of the conceptual framework for PWTL are children with specific learning disabilities who present with heterogenous learning profiles and difficulties therein with one or more of the skills supported by occupational therapists (OT) and speech language pathologists (SLP). In the second to bottom row of the figure are skills needed for writing common to both professions (cognition, executive functions, working memory) and those unique to OT (graphomotor, visual processing) and SLP (language, spelling, phonology). The professionals trained through PWTL are reflected in the third row from the bottom and include OT and SLP graduate students. As part of PWTL, these individuals worked together toward meeting competencies for the construct of interest which is written expression in elementary schoolchildren including those with specific learning disabilities. This is depicted in the top row of the figure with the common goal of supporting academic curriculum in school settings for students with disabilities.

Table 1. PWTL Goals and Competencies

The **overarching goal** of PWTL was to foster a spirit of collaboration by engaging program scholars with interprofessional education experiences focused on improving writing outcomes in elementary school children with Specific Learning Disabilities. The three goals of the project (included in the table below) were in response to the OSEP request for grant proposals which required that graduate students engage in interdisciplinary coursework, complete interdisciplinary group projects, and engage in coordinated clinical experiences. The eight competencies stem from the conceptual framework, current best evidence, and expectations of school practice. These goals and competencies should be agreed upon by all educators involved in implementation and can be used to guide curriculum implementation.

Goal 1: Program scholars will complete interdisciplinary coursework that provides foundational information for understanding, assessing, and treating written expression deficits in children with Specific Learning Disabilities.	
	Competency 1: Evaluate and utilize IDEA and IEP policies for delivering legal and ethical related services to children with SLD.
	Competency 2: Use current theories and research to generate a list of skills that children must possess for successfully accomplishing educational goals set by Common Core State Standards (CCSS) or other educational benchmarks.
	Competency 3: Compare and contrast diagnostic criteria set forth by IDEA with those set forth by best evidence and frameworks and analyze their implication on related services in the school system.
	Competency 4: Compile evidence based intensive interventions studies that demonstrate efficacy for achieving educational goals.
Goal 2: Program scholars will acquire the skills to collaborate in interdisciplinary teams to develop integrated, high quality and efficient interventions for treating written expression deficits in children with Specific Learning Disabilities.	
	Competency 5: Evaluate issues in students' performance through observations and analysis of educational products.
	Competency 6: Develop intervention protocols that align with educational standards and meet individual student needs.
Goal 3: Program scholars will collaborate in the delivery of individualized interventions for improving written expression in children with Specific Learning Disabilities in a high needs elementary school.	
	Competency 7: Deliver intensive interventions as an interdisciplinary dyad in the least restrictive environment (LRE) that aligns with educational standards, current best evidence, and meets individual student needs.
	Competency 8: Evaluate the impact of the interdisciplinary, inclusive, individualized high-intensity services for the child with SLD.

Table 1. Curriculum Table

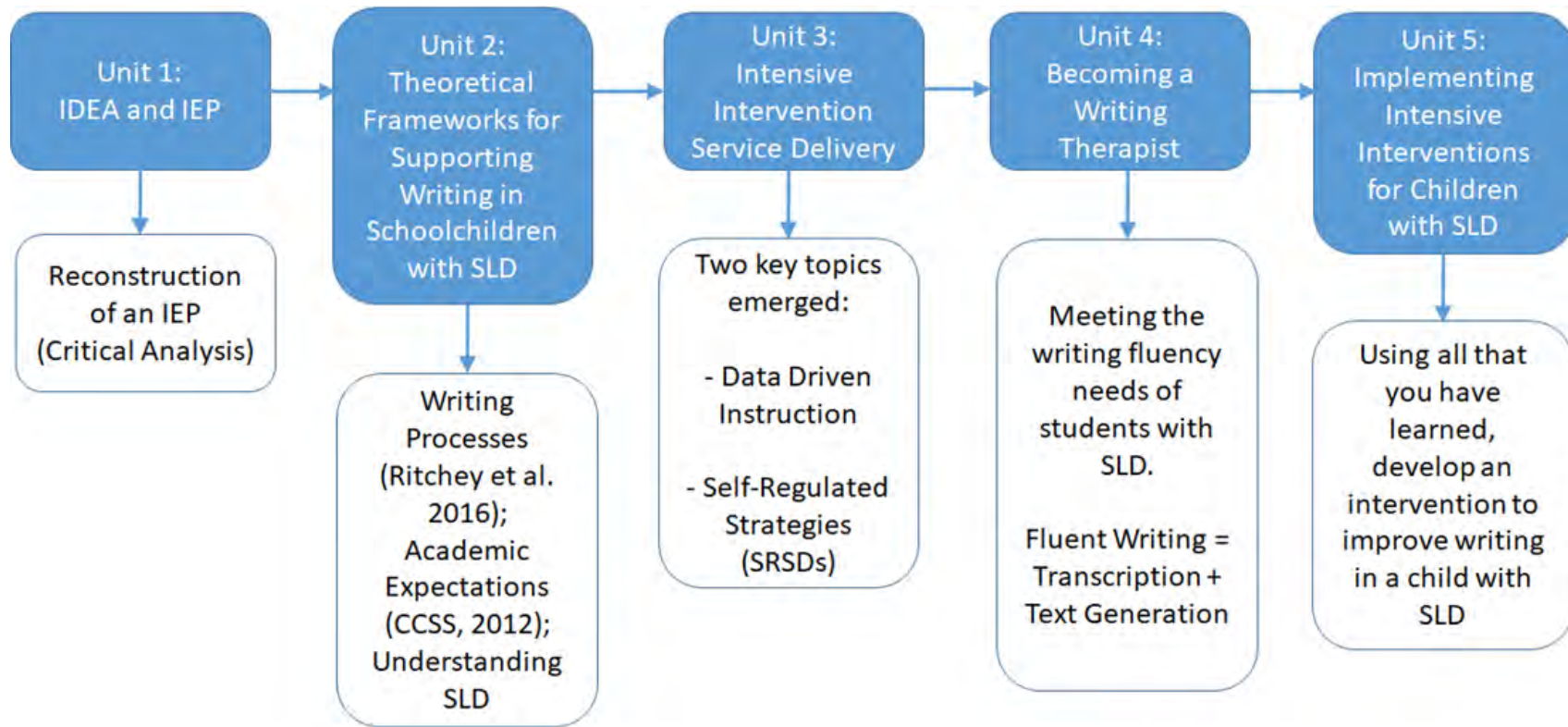
The curriculum table below includes five **Implementation Science Units** provided as part of the PWTL curriculum. Each unit has a titles, unit objectives, group assignments and coordinated clinical experiences. Note that unit 2 is divided into two sections (section A & B) and that unit 5 represents an interprofessional clinical experience. This table provides goals and objectives to guide instruction and modifications and adaptations should be made to group assignments and coordinated clinical experiences as needed. Think of this table as a road map to guide learning, instructors as drivers must decide which roads to send their students down, as leader or to prepare them for the road alone. Also, check out the road map in Figure 2.

Implementation Science Unit	Unit Objectives	Unit Assignments & Coordinated Clinical Experiences
<p>Unit 1: Individuals with Disabilities Education Act (IDEA) and the Individualized Education Plan (IEP)</p>	<p><i>Objective 1.</i> Program scholars will describe and critically evaluate the impact of IDEA legislation on the delivery of services in the public school system for children receiving services under the qualifying category of Specific Learning Disabilities.</p> <p><i>Objective 2.</i> Program scholars will understand the advocacy and legal processes available to families/caregivers and IEP team members as it relates to the development of an IEP for children with SLD who have high intensity needs for written expression deficits.</p>	<p>Group Assignments:</p> <ul style="list-style-type: none"> • IEP deconstruction connecting each component with the legal mandates set forth by the N.J. Department of Education. • Rewrite IEP goals while accounting for the provision of integrated services by OT and SLP providers to provide individualized, high intensity services. <p>Coordinated Clinical Experience:</p> <ul style="list-style-type: none"> • Observation of an IEP meeting • Complete IEP Observation Summary • Individual Interdisciplinary Reflection Paper
<p>Unit 2 Theoretical Frameworks for Supporting Writing in Schoolchildren with Specific Learning</p>	<p>Section A – Writing Processes and Academic Expectations</p> <p><i>Objective 1.</i> Program scholars will define, describe, and differentiate writing related processes needed by children to write, using the Ritchey et al. (2016) framework.</p> <p><i>Objective 2.</i> Program scholars will become familiar with the Common Core State Standards (CCSS; 2012) needed for academic writing in schoolchildren.</p>	<p>Group Assignments:</p> <ul style="list-style-type: none"> • Program scholars will complete a project such as a scoping review of literature related to the project <p>Coordinated Clinical Experience:</p> <ul style="list-style-type: none"> • Observe writing instruction in a general education classroom

<p>Disabilities (SLD)</p>	<p>Section B – Understanding SLD <i>Objective 3.</i> Program scholars will understand disorders associated with SLD including dyslexia, dysgraphia, dyscalculia, language-based learning disability, and other perceptual impairments. <i>Objective 4.</i> Program scholars will define and describe the criteria set forth by IDEA that qualifies children for services under SLD and relate these back to the theoretical model of writing and academic standards.</p>	<ul style="list-style-type: none"> • Program scholars will observe a child with SLD engaging in writing instruction
<p>Unit 3 Intensive Intervention Service Delivery</p>	<p><i>Objective 1.</i> Program scholars will complete selected online training modules from the National Center for Intensive Intervention related to making and implementing data-based intervention decisions. <i>Objective 2.</i> Program scholars will educate one another on key concepts included with intensive interventions.</p>	<p>Group Assignment:</p> <ul style="list-style-type: none"> • Review modules provided by the National Center for Intensive Intervention and report their findings to the entire cohort.
<p>Unit 4 Becoming a Writing Therapist – Meeting the Writing Fluency Needs of Students with SLD</p>	<p><i>Objective 1.</i> Program scholars will become familiar with a systematic and evidence-based approach to writing instruction for elementary school children.</p>	<p>Group Assignment:</p> <ul style="list-style-type: none"> • Simulation experience of an IEP meeting. <p>Coordinated Clinical Experience:</p> <ul style="list-style-type: none"> • There is no coordinated clinical experience associated with Unit 4

<p>Unit 5 Implementing Intensive Interventions for Children with SLD</p>	<p><i>Objective 1.</i> Program scholars will work in interprofessional dyads to apply knowledge, understanding, and skills gained from units 1 through 4 to assess a child in their clinical/fieldwork placement.</p> <p><i>Objective 2.</i> Program scholars will work in interprofessional dyads to apply knowledge, understanding, and skills gained from units 1 through 4 to plan an intensive intervention with a child in their clinical/fieldwork placement.</p> <p><i>Objective 3.</i> Program scholars will work in interprofessional dyads to apply knowledge, understanding, and skills gained from units 1 through 4 to implement an intensive intervention with a child in their clinical/fieldwork placement.</p> <p><i>Objective 4.</i> Program scholars will work in interprofessional dyads to reflect upon on the efficacy of the writing interventions.</p>	<p><i>Coordinated Clinical Experience:</i></p> <ul style="list-style-type: none"> • Provision of integrated services for students with SLD • As part of clinical placement or fieldwork • Simulated learning experiences including video-based assessment • As part of the remote writing instruction study
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Figure 2. Curriculum Road Map for Project Write to Learn five Implementation Science Units



The curricular road map provides a visual depiction of the information provided in the curriculum table (Table 2) and can help demonstrate how coursework, group assignments, and coordinated clinical experiences connect. This road map was modified for each year of the project as we modified curriculum based on our program evaluation; something that we suggest any users do with this resource. The blue bubbles (or main road) were the same across each year as were the white bubbles (side streets). The information on the side streets was included as students were led down that road. Additional side streets (or cul-de-sacs, if you wish) were included on each side street representing completed assignments and clinical experiences. This can be used as a mind map by the course instructor at the onset and end of each unit or students to visually show how learning connects. Students should be encouraged to use this as a cognitive learning strategy to mind map their own learning.

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*indicate an assigned or supportive reading for students

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PWTL - Coordinated Clinical Experience Rubric

	Needs improvement (0)	Meets expectations (1)	Exceeds expectations (2)
<p>Clearly describes what was observed: - Observation is well written; - Observation is clearly described; - Observation is well organized; - Observation is comprehensive. 33.33%</p>			
<p>Interpretation of Observation: - Includes discussion of observations beyond a 'report' - Includes discussion of techniques or strategies observed and if they worked. - Includes discussion of what may have been completed differently; - Includes both OT and SLP clinical considerations. 33.33%</p>			
<p>Observation discussion coordinates to unit purpose and objectives: - Connections are made between unit content (readings, shared didactic coursework, other resources) and observation 33.33%</p>			
<p>Document is written clearly and adheres to academic writing standards and scientific writing standards (current APA guidelines). 0%</p>			

PWTL - Unit 1 - IEP Deconstruction

	Needs improvement (0)	Meets expectations (1)	Exceeds expectations (2)
<p>Deconstruction of IEP by locating the following items from sample IEP:</p> <ul style="list-style-type: none"> • Present level of education performance (PLoef; PLAF; PLEP) • Annual goals • Supports and Services for Student • Least Restrictive Environment • Test Accommodations • Language Needs of the Child • Special education and related services: • Classroom mandate/environment • Frequency and location of services • Transition service needs that focus on the student’s courses of study, beginning at age 14 or younger, if appropriate • Measuring progress. <p>33.33%</p>			
<p>Reconstruction of IEP by rewriting/restating the following items from sample IEP:</p> <ul style="list-style-type: none"> • Present level of education performance (PLoef; PLAF; PLEP) • Annual goals • Supports and Services for Student • Least Restrictive Environment • Test Accommodations • Language Needs of the Child • Special education and related services: • Classroom mandate/environment • Frequency and location of services • Transition service needs that 			

	Needs improvement (0)	Meets expectations (1)	Exceeds expectations (2)
<p><i>focus on the student’s courses of study, beginning at age 14 or younger, if appropriate • Measuring progress.</i> 33.33%</p>			
<p><i>Interdisciplinary IEP goals : • Identify OT goals on IEP (if any) • Identify SLP goals on IEP (if any) • Develop 1 or 2 new treatment goals that incorporate both OT and SLP targets as 1 goal.</i> 33.33%</p>			

Unit 1 - Individual Reflection

	Needs improvement (0)	Meets expectations (1)	Exceeds expectations (2)
<ul style="list-style-type: none"> • <i>Able to explain benefits and concerns related to interdisciplinary interaction and interdisciplinary teams.</i> • <i>Able to compare and contrast the differences between Interprofessional Education (IPE) and Interprofessional Practice (IPP) and explain how PWTL aligns with both.</i> • <i>Able to identify personal attitude toward learning in interdisciplinary collaboration.</i> <p>100%</p>			

Project Write to Learn Intervention Lesson Plan

Instructions: Develop one annual (long-term) goal and session objectives along for a six-week intensive and individualized intervention plan. The long-term goal should be what you intend to achieve as a result of the full six-week intensive intervention. See template in Bb and resources from both OT and SLP departments for intervention plan development. The challenge here is to integrate information from Units 1 through 4 and apply this knowledge to your lesson planning. It is a good idea to select an SRSD strategy as an annual goal that integrates skills such as handwriting, spelling, posture, sentence formulation, etc. The lesson plan should clearly reflect what will occur during each session and it should be clear how each session goal and activities support the annual goal.

Additional considerations for intervention plan development:

- a. Develop the intervention plan with your interprofessional partner and based upon the assessment findings
- b. Your intervention plan does not need to be scripted verbatim, rather, it should list goals and how you will achieve these goals either within the classroom or as part of individual therapy plans
- c. Your intervention plan should include the frequency that you would work with the child as a dyad in the therapy room or in the classroom; and should outline the steps you will take to meet goals and strategies you will use to meet these goals.
- d. You must show how you have included OT and SLP considerations in your plan alongside collaborative treatment practices.

Student Name:

Schedule of Sessions including number of weeks, times per week, and length in minutes of session (use your best judgement here):

Student Grade Level:

- Summarize the strengths and weaknesses the child demonstrates:

- Intervention Goal (Annual Goal)*:

**The intervention goal should be the over-arching goal for the intensive intervention provided by OSEP scholars, it would be equivalent to an Annual Goal on an IEP. Recall that we only write Annual Goals in schools (not LTG/STG/Session objectives). The goal should reflect a levels of language approach (sub-word, word, sentence, discourse) that accounts for both OT and SLP needs identified as targeted areas.*

- Session Objectives**:

***Session objectives should indicate the goals you plan on completing each time you meet with the child that align and support the intervention goal. It may be that you have one or more objectives each session, or session objectives that will require multiple sessions to complete. Whatever the case may be, your plan should align with how you envision the intervention to meet the student's needs. For session objectives, you should still maintain a levels of language approach; however, you can individualized OT and SLP goals for data tracking and insurance reimbursement purposes.*

Safety considerations and precautions:

Area of intervention	Activity List of Materials, set up	Lesson Plan Description:		Potential Up/Downgrades
		Set-up Verbal		
		Input		
		Modeling		
		Check for Understanding		
		Guided Practice		
		Closure		

Project Write to Learn

Observation and Assessment Checklist

Name of Child: _____

Date of Assessment: _____

School: _____

Grade Level: _____

Assessed by: _____







Part One: (Observation)

Setting for assessment.

- _____ classroom
- _____ therapy room
- _____ other

DURING ASSESSMENT OBSERVATIONS:

Motor

<p>Pencil Grasp (Circle One)</p>			<p>OR</p> 	<p>Circle Grasp Used</p> <p>Indicate Hand dominance/preference:</p> <p>Comments:</p> <p>(Functional or Non-Functional/Age Appropriate or Not age appropriate/hand switching, etc.)</p>
	<p>FISTED GRIP 1-2 years old</p> <p>Children often hold their writing tool like a dagger, scribbling using their whole arm.</p>	<p>DIGITAL PRONATE GRIP 2-3 years old</p> <p>All fingers are holding the writing tool but the wrist is turned so that the palm is facing down towards the page. Movement now comes mostly from the elbow. Children should start being able to copy a horizontal, vertical and circular line.</p>		
				
	<p>4 FINGER GRIP 3-4 years old</p> <p>4 fingers are held on the writing tool. Movement is mostly from the wrist and the hand and fingers move as one.</p>	<p>STATIC TRIPOD GRIP 4-6 years old</p> <p>This is a 3 finger grasp, where the thumb, index finger and middle finger work as one unit.</p>	<p>DYNAMIC TRIPOD GRIP By 6 or 7 years old</p> <p>Using only 3 fingers to hold the writing tool. This is the ideal grip to help move the pencil efficiently, accurately.</p>	

Postural Control during Assessment

Indicate postural observations by checking off all that apply and providing additional comments below:

- Student sits on feet
- Student is standing at desk
- Fidgeting
- Student often sits with head down
- Supporting hand on hand or arm
- Other (Describe)

Comments on seated posture:

Self – regulation

Sensory:

- Pressure with pencil

Cognitive:

- Goal setting, planning, organizing,

Behavioral:

- Self-evaluating, revising, and self-rewarding
- Self-monitoring

Comments: (Readiness to work, behavior during assessment, need for movement, distractibility and ability to return to task, direction following)

Cognition

- Attention:
 - Sustained attention: time
 - Alternating
 Comments:
- Memory
 - Comments:
- Indicate the type of prompts which were most effective for the child
- Observable challenges observed when writing:

Visual

Comments: (Able to visually attend, leans close to writing, squints)

Writing Task

	Yes	No	Comments
Did the student understand the prompt?			
Did the student formulate a verbal response to the prompt? (Idea generation)			
Did student pose questions to evaluator?			
Did student use strategies to assist with planning, writing, revising?			

Part Two (Review of the Final Written Product):

Language

1. Spelling
2. Text Generation
3. Ability to turn ideas into text
4. Sentence structure, syntax (*See Koutsoftas 2016 available on Bb, and GMSL 6012 resources*).
5. Productivity
6. Complexity
7. Accuracy
8. Mechanics

Language Skills			
	Yes	No	Comments
Did students organize thoughts in linear and logical manner?			
Does each sentence relate to the topic?			
Does each sentence clearly relate to the prior and following sentence?			
Does the response include a setting, problem, and attempted solution?			
Vocabulary that is used is correct and varies?			
Correct verb tenses, prefix and suffix use?			

Legibility:

Overall legibility (Letter formation/letter quality, Line approximation, Spacing between letters and lines, Letter size)

Legibility			
	Yes	No	Comments
Able to use margins correctly?			
Letters placed appropriately on the lines?			
Able to size letters appropriately?			
Able to space letters appropriately?			
Able to space words appropriately?			

Uses capitalization appropriately?			
Can the child read back his or her own work with clarity?			
Can you and another adult read what the child has written?			
Can another child in the classroom read what has been written?			

Program scholar(s): _____

Purpose: To rate the quality of the six-week intensive intervention plan developed by program scholars based on their assessment and observation of Kelly, a second grade student with SLD.

Description: The six-week intensive intervention plan was developed by program scholars working in interprofessional dyads and based on their virtual assessment of a second grade student with SLD. The intervention plan should reflect knowledge gained from units 1 through 4 and applied to this particular case study.

- The ratings listed below, 1 – below expectations, 2 – meets expectations, and 3 – exceeds expectations.

	Criteria	1	2	3
Goals and Session Objectives	The annual goal... <ul style="list-style-type: none"> • ...addresses the individualized needs of the student identified as weaknesses • ...is achievable in six-weeks, is strategy based, and reflects OT and SLP skill areas for writing • ...is clearly written The session objectives... <ul style="list-style-type: none"> • ...clearly support the annual goal and are distributed appropriately across the six-week intervention • ...are clearly written 			
Intervention Plan	The intervention plan... <ul style="list-style-type: none"> • ...aligns with the annual goal and session objectives • ...is comprehensive and detailed enough to provide six-weeks of intervention • ...utilizes NCI practices included data collection each session • ...is engaging for a the child • ...includes appropriate scaffolds and upgrades/downgrades • ...is clearly written 			
Alignment with PRTL	The goals and intervention plan... <ul style="list-style-type: none"> • ...clearly reflect knowledge and skills gained from Project Write to Learn (Units 1 through 5) 			
Peer Review and Discussion	The peer review process... <ul style="list-style-type: none"> • ...was completed and discussed as part of de-brief meeting • ...included feedback that was constructive and clearly described the strengths and weakness of the intervention plan (i.e., glows and grows) • ...included interpretation and application of feedback towards the final product submitted 			
			Sum of Scores:	
			6.0 and higher =	
			meets expectations	

Additional comments:

Program scholar(s): _____

Purpose: To rate the quality of the observation and assessment checklist and write up conducted by program scholars for Darrell, a third-grade student with SLD.

Description: Program scholars will complete an observation and assessment of checklist and write up for Darrell, a third grade student with SLD. Using information from the observation and assessment write up, program scholars will work together to write a 1-page summary of findings. This rubric will be used by instructors to score the submitted work product.

- The ratings listed below, 1 – below expectations, 2 – meets expectations, and 3 – exceeds expectations.

	Criteria	1	2	3
Observation and Assessment Checklist	The observation and assessment checklist: <ul style="list-style-type: none"> • Is completed as an interprofessional dyad • Observation and assessment checklist notes are aligned with the Ritchey et al (2016) framework • Clearly written 			
Observation and Assessment Summary Report	The observation and assessment summary report: <ul style="list-style-type: none"> • Is written together as an interprofessional dyad • Observation and assessment report aligns with the Ritchey et al (2016) framework • Report includes recommendations for areas of instruction for subsequent intensive intervention • Clearly written 			
			Sum of Scores: <i>3.0 and higher = meets expectations</i>	

Additional comments:

Program scholar: _____

Reflection:

Students will provide a brief, one-page personal reflection related to their interdisciplinary dyad and the Unit 5 learning experience including simulated assessment, IEP simulation experience, and intervention plan development.

	Criteria	Needs to Rewrite	Meets Expectations	Exceeds Expectations
Interdisciplinary Reflection	<ul style="list-style-type: none"> • Able to explain benefits and concerns related to interdisciplinary interaction and interdisciplinary teams during all aspects of unit 5 including conducting the assessment, participating in the simulated IEP meeting, and completing the intervention plan. • Able to compare and contrast the differences between Interprofessional Education (IPE) and Interprofessional Practice (IPP) in the context of Unit 5. • Able to identify personal attitude toward learning in interdisciplinary collaboration with peers and how this has changed since participating in Project Write to Learn (check out your Unit 1 reflection to reflect on this). 			
			Met/exceeded all expectations	

Comments: