OCCUPATIONAL THERAPY
COLORADO STATE UNIVERSITY

Bridging Practice: An Occupational Therapy-Informed Sensory Toolkit for Speech-Language Pathologists

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Capstone Site: Breakthrough Therapy Services, Davie, FL

GOAL, OBJECTIVES & ACTIVITIES

- **Project Goal:** The overarching goal of this capstone project is to design a practical and user-friendly sensory toolkit that enables SLPs to confidently implement OT-informed sensory strategies in speech sessions. By strengthening interprofessional collaboration and continuity of care, the toolkit will empower SLPs to support regulation, engagement, and communication more effectively in children with sensory processing differences.

Projected Completion Date (month and year)	Individualized Student Learning Objectives
September 2025	By the end of Week 3, I will complete a needs assessment by conducting structured interviews and administering a pre-survey with a minimum of three SLPs to evaluate their current knowledge, confidence, and perceived needs related to sensory regulation and strategy implementation in SLP practice.
November 2025	By the end of Week 9, I will finalize all sections of the sensory toolkit by compiling evidence-based sensory strategies, practical tools, and implementation guidance organized into clearly defined sections (e.g., Introduction to Sensory, Alerting, Calming) for integration into SLP sessions.
November 2025	By the end of Week 12, I will complete a round of revisions to the sensory toolkit based on practitioner feedback, implementing changes to improve the clarity, usability, and relevance of each section for daily clinical practice.
December 2025	By the end of Week 13, I will distribute the finalized sensory toolkit to the clinical site and confirm that at least three SLPs have received and are prepared to trial or implement the complete, sectioned resource in practice.
December 2025	By the end of Week 14, I will develop and deliver a professional presentation—including a slide deck and handout—summarizing the purpose, development, and application of the sensory toolkit, highlighting its section structure and intended use to support ongoing dissemination and interprofessional collaboration.

Progress				
Met	Met	Met	Met	Met

Project Plan & Activities (Chronological Overview)

- **Pre-Survey & Initial Observations:**
  - Distributed a pre-survey and concurrently observed therapy sessions.
- **Interviews & Needs Assessment:**
  - Developed tailored interview questions based on early insights and conducted interviews with at least three SLPs to explore current practices, needs, and barriers.
- **Toolkit Development (Section-by-Section):**
  - Due to practitioner availability, scheduling, and site logistics, shifted from the intended stepwise plan to developing each toolkit section—*Introduction to Sensory, What is "Alerting," What is "Calming," Site-Specific Considerations,* and *Additional Resources & Helpful Contacts*—in a structured, section-by-section process.
- **Ongoing Collaboration & Feedback:**
  - Maintained consistent touchpoints with my site mentor and SLPs/SLPAs to gather suggestions, receive feedback, participate in sessions, and trial or demonstrate sensory strategies. This ongoing collaboration identified what information was registering, what needed to be addressed, and what would provide the most benefit for long-term use.
- **Draft Review & Final Revisions:**
  - After completing an initial draft, received additional feedback from my site mentor, CSU faculty mentor, and participating SLPs/SLPAs to ensure content quality, cohesiveness, and readiness for use. Reviewed all feedback to guide final revisions.
- **Toolkit Finalization & Dissemination:**
  - Formatted the finalized toolkit for print and digital access and distributed it to the clinical site, ensuring availability to at least three SLPs. Created a slide deck and handout summarizing toolkit development, evidence base, and content.
- **Project Presentation:**
  - Presented outcomes to SLPs, administrators, and other stakeholders to promote long-term use in clinical practice.
- **Personnel, Materials, and Resources:**
  - Project required support from mentors, participating SLPs/SLPAs, and myself. Used sensory tools and printed handouts and shared digital platforms (Slack and Canva). Most sensory materials, tools, and Canva Pro expenses were covered by the capstone student (me) due to limited universal resources at the site.
- **Clinical Space & Privacy:**
  - Access to therapy rooms was essential for conducting observations, with all activities following privacy guidelines.

BACKGROUND/ LITERATURE REVIEW WITH THEORETICAL BASIS

Children with sensory processing differences often experience challenges in communication, regulation, and everyday routines, which impact occupational performance across environments. Although SBIs traditionally fall within OT, many SLPs now use these strategies to better support children whose communication and participation needs are influenced by sensory processing (Raubenheimer et al., 2022). A needs assessment with four SLPs/SLPAs at Breakthrough Therapy Services identified consistent challenges—including limited training, resource constraints, and difficulty identifying sensory needs (I. Reisman, T. Strickland, G. Vaysman, & S. Santa-Coloma, personal communication, September 2025)—reflecting trends noted by Raubenheimer et al. (2022), who found that while SLPs regularly use SBIs, uncertainty persists due to limited formal education and unclear role boundaries. Foundational texts such as *The Out-of-Sync Child* (Kranowitz, 2022) and *Sensational Kids* (Miller et al., 2014) emphasize that sensory processing differences fall along a continuum, are often misinterpreted as symptoms of ASD or ADHD, and can lead to mislabeling. Dunn's Model of Sensory Processing (1997) provided the theoretical grounding for this project, offering four sensory patterns—Low Registration, Sensory Seeking, Sensory Sensitivity, and Sensory Avoiding—that explain how children respond to input and guide regulation-focused supports. This model directly shaped the OT-informed sensory toolkit and accompanying training to help SLPs identify sensory patterns, recognize arousal states, and confidently implement supportive sensory strategies in everyday practice.

OUTCOME EVALUATION METHODS

Formative Evaluation

- Guided project progress through an ongoing feedback process during development of all five toolkit sections (Introduction to Sensory, What is "Alerting," What is "Calming," Site-Specific Considerations, Additional Resources & Helpful Contacts).
- Feedback gathered in person and via alternative communication, with input from capstone site mentor, faculty mentor, and ≥3 SLPs/SLPAs after the initial draft to guide final revisions.
- Bi-weekly meetings with capstone site mentor and monthly check-ins with faculty mentor supported decision-making, monitored progress, and ensured alignment with clinical and academic expectations.

Summative Evaluation

- Began with a pre-survey to assess baseline knowledge and confidence among participating SLPs.
- Followed by session observations and interviews with ≥3 SLPs to identify needs and context-specific factors that shaped toolkit development.
- Included a post-survey after toolkit dissemination to assess changes in confidence, knowledge, and use of sensory strategies.

Multi-step evaluation using surveys, interviews, observations, and structured feedback ensured continuous improvement, effective implementation, and a toolkit that meets real-world needs of SLPs and children served.

FINDINGS

01	Increased familiarity with sensory processing differences:	• 3/4 strongly agreed • 1/4 agreed
02	Comfort using sensory strategies:	• 4/4 agreed post-survey • 2/4 on pre-survey
03	Recommendation of toolkit to other SLPs:	• 4/4 agreed
04	Anticipated impact of toolkit:	• 2/4 indicated impactful • 2/4 very impactful

Summary:

- Evaluative measures indicate overall benefit and effectiveness of project deliverables and activities.
- Toolkit demonstrates long-term usability and supports improved regulation, participation, and engagement for children served.

DISCUSSION/ CONCLUSION

1	Sensory toolkit designed as a standalone, sustainable resource with digital and print versions for long-term use.	✓
2	Five sections provide foundational knowledge on sensory processing, Dunn's Model, sensory patterns, key terms, and practical strategies; also includes time, space, materials, scheduling considerations, and additional resources.	✓
3	A centrally stored sensory basket addressed barriers to tool access and supported ease of implementation.	✓
4	Emphasized interprofessional collaboration with OTs, SLPs, SLPAs, and families to foster shared understanding, communication, and long-term buy-in.	✓
5	Guided by Dunn's Model and continuous feedback, including pre-surveys, interviews, in-session observations, ongoing suggestions, trialing, and resource development.	✓
6	Promoted child-centered, ethically grounded care, strengthened interdisciplinary collaboration, and supports improved participation, regulation, and occupational performance.	✓
7	Project successfully met its goals, providing a practical, adaptable toolkit for long-term use by SLPs and other practitioners to enhance therapeutic outcomes.	✓

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KEY REFERENCES

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