OCCUPATIONAL THERAPY
COLORADO STATE UNIVERSITY

UNIVERSITY OF LIMERICK OLLSCOIL LUIMNIGH | Department of Physical Education and Sport Sciences

Enhancing Inclusion: The Impact of OT-Informed Education on Instructors Supporting Students With Autism Spectrum Disorder (ASD) in the I-PLAY Program at the University of Limerick (UL)

OTD candidate: Alexis Gomez-Vargas
Doctoral Capstone Coordinator: Julie Silver Seidle Ph.D., OTR/L
Capstone Site Mentor(s): Brigitte Moody, MA, Seán Healy, PhD
Faculty Site Mentor: Jaewon Kang, Ph.D., MSOT
Content Mentor: Anita Bundy, ScD, OT/L, FAOTA, FOTARA

BACKGROUND/ LITERATURE REVIEW

Background
- The I-PLAY program at UL provides physical activity opportunities for children (5-21 yrs) with disabilities.
- It is run by UL faculty and delivered by 3rd & 4th-year Physical Education and Sport Science (PESS) students.
- The program allowed me work with an interdisciplinary team beyond traditional OT settings.
- Aligns with my interests in physical activity, advocacy, and expanding OT roles.
- I offered indirect OT services by educating instructors to strengthen their confidence to support I-PLAY participant engagement.

Literature review
Children have the right to meaningful, equitable participation in Physical education, yet several barriers limit instructors' ability to support all learners:
- I-PLAY instructors feel underprepared to support students with ASD, consistent with research showing only moderate teacher confidence, even though brief training can improve it (Baek et al., 2024).
- Despite IDEA's mandate for inclusion, limited training and systemic barriers still affect consistent implementation (U.S. Department of Education, 2025).
- A needs assessment targeted to I-PLAY stakeholders, highlighted challenges in addressing sensory, cognitive, and motor needs, particularly when adapting activities or responding to dysregulation
- Adapted PE is expanding, but OT informed strategies are not routinely used, even though collaboration is recommended and instructors want more practical tools (Philpott Robinson et al., 2024; Ortlinghaus, 2021).
- Increased training and collaboration, specifically incorporating OT expertise, can strengthen meaningful participation in PE for all students.

MODELS/ THEORIES/ FRAMEWORKS

MODELS / FRAMEWORKS	CONTRIBUTION
Dunn's Model of Sensory Processing	Guided deliverables, education, etc.
Partnering 4 Change Model (P4C)	Guided how education was delivered (collaboration, capacity-building, coaching).
A clinical reasoning framework for children with ASD experiencing sensory challenges framework	Clarified why sensory-informed strategies matter for students with ASD.

GOALS, OBJECTIVES & ACTIVITIES

Goal
Determine whether education from an Occupational Therapy (OT) perspective within the I-PLAY program improves I-PLAY instructors' self efficacy to support and engage ASD students.

INDIVIDUALIZED STUDENT LEARNING OBJECTIVES
Develop an outline of strategies and a general informational presentation highlighting children with ASD and their sensory processing needs. This resource will support the education of I-PLAY instructors &serve as a guide to assist in enhancing student participation in the I-PLAY program.
Administer education using deliverables and conduct a pre-/post survey after the education to evaluate instructor's self-efficacy in supporting children with ASD.
Refine and update the educational resources based on survey
Develop a presentation/poster to disseminate my final project.

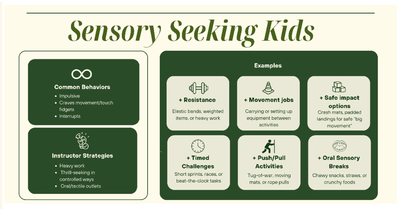
OUTCOME EVALUATION METHODS

Program Development and Delivery
- Designed evidence-based strategies using the needs assessment and relevant literature.
- Delivered a 45-minute in-person presentation, provided in person guidance throughout the 12-week program, and provided additional support via email for I-PLAY instructors.
- Created supplemental resources and uploaded them to the cloud-based learning management system for continued access.

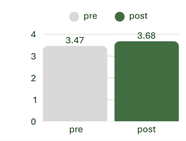
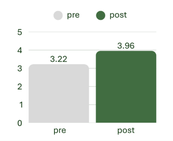
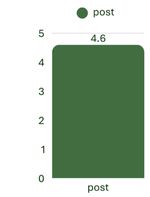
Data Collection
- Data was collected through pre- and post-program surveys at the start and end of the course.
- Pre-and Post-surveys included:
  - Belief items (4-point Likert scale).
  - Confidence and Satisfaction items (5-point Likert scale).
  - Three open-ended questions for qualitative feedback.

FINDINGS

Outputs
- Program content development
  - First day of I-PLAY social story
  - Sensory Strategy Activity resource cards
  - Updated intake forms
  - Environmental modifications of I-PLAY Facility Handout
  - Education on the lived experience of the ASD community
  - Applications taught and implemented include visual timer, box breathing, and a visual calendar
  - Augmentative and alternative communication (AAC) resources



Outcomes
Qualitative Feedback
- Participant feedback indicated growing confidence and an increased ability to apply learned strategies in real-world contexts. Many participants emphasized the value of concrete examples and instructor modeling in supporting their learning. I-PLAY Instructors also expressed interest in additional hands-on, demonstration-based practice to further strengthen skill development.

BELIEFS *Agreement with inclusion-related beliefs*	CONFIDENCE *Confidence in applying & supporting I-PLAYers via strategies*	SATISFACTION *Perceived relevance, usefulness, and satisfaction with education*
Example question that showed the biggest change		
"A child with ASD can contribute positively to the learning of peers during I-PLAY."	"I can modify I-PLAY activities appropriately for a child with ASD."	
		
Largest change in beliefs (+0.18) was observed between the pre and post survey	Largest change in confidence (+0.74) was observed between the pre and post survey	High mean satisfaction rating of 4.6 during post survey
OVERALL OUTCOMES		
Minimal change observed. However, scores were already high, indicating participants entered with positive attitudes toward inclusion.	Clear growth across most items. Increased confidence suggests strengthened self-efficacy in supporting and including children with ASD.	Reflects strong perceived value and applicability of the training.

ANTICIPATED IMPACT

- Sustained inclusive practices across I-PLAY and potentially other programs
- Strategies, presentations, and resources be adopted as part of ongoing professional development for future I-PLAY student instructors
- Student with ASD, experience increased participation, engagement, and success in physical education programs when Instructors that have have been provided the OT informed education
- Increased advocacy for inclusive practices and student supports
- Increased participation of students with ASD in the I-PLAY program

CONCLUSION

This capstone demonstrated that OT-informed education can improve I-PLAY instructors' confidence, preparedness, and strategies for supporting ASD students. Confidence is widely recognized as a core component of teacher self-efficacy (i.e., one's beliefs in their capabilities to organize and execute actions required for effective teaching), the observed gains likely reflect meaningful increases in self-efficacy. Research supports this link: teachers with higher self-efficacy tend to show stronger teaching effectiveness, resilience, and capacity towards implementing inclusive practices (Lazarides & Warner, 2020; Gordon, 2023).

ACKNOWLEDGEMENT & REFERENCES

Thank you all for your support throughout the Capstone journey. It was a pleasure working with you. I'm beyond grateful for the encouragement, guidance, and support.