The OPTYCs PER-Interest group: A progress report

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The mission

- To strengthen Physics Education Research (PER) knowledge and engagement within the physics TYC community
- To promote and support work collaborations in PER

The mission

OPTYCs is committed to assisting TYC faculty identify and implement best PER practices adapted to their specific needs.
OPTYCs can assist PER researchers broaden their scope and study the environments and challenges faced by the very diverse TYC physics student population. This could result in strategies to improve recruitment and retention for all students.

Year 1: what has been done?

- Meetings with PER experts
- Public events: Journal club meetings, panel discussions, workshops
- Biweekly newsletter “SPOTLIGHT”
- YouTube Channel
- Joint session at PERC

Public events
Fall 2022
Journal club meetings
- Demographics of physics education research Stephen Kanim & Ximena Cid
- Increased learning in a college physics course with timely use of short multimedia summaries
  - Spencer Dunleavy et al.
- Group roles in unstructured labs show inequitable gender divide
  - Katherine N. Quinn et al

Spring 2023
Panel discussions
- History of TYC contributions to PER
- What is PERC? Let’s connect
- Mechanics and E & M assessment tools: An overview

Workshop
- Using PhysPort Data Explorer to analyze FCI data

Year 1: what has been learned?
(From participants feedback)

- Most participants in public events are aware of PER
- TYC faculty are eager to share their classroom experience and learn from others
- TYC faculty are interested in PER research adapted to their environments
- Time is the major obstacle to a broader engagement with PER

Year 2: a heads-up

- September 22 kick-off
- Focus on labs and scientific reasoning
- Favorite classroom activities: share and discuss
- Computational physics
- Artificial Intelligence/Chatbots