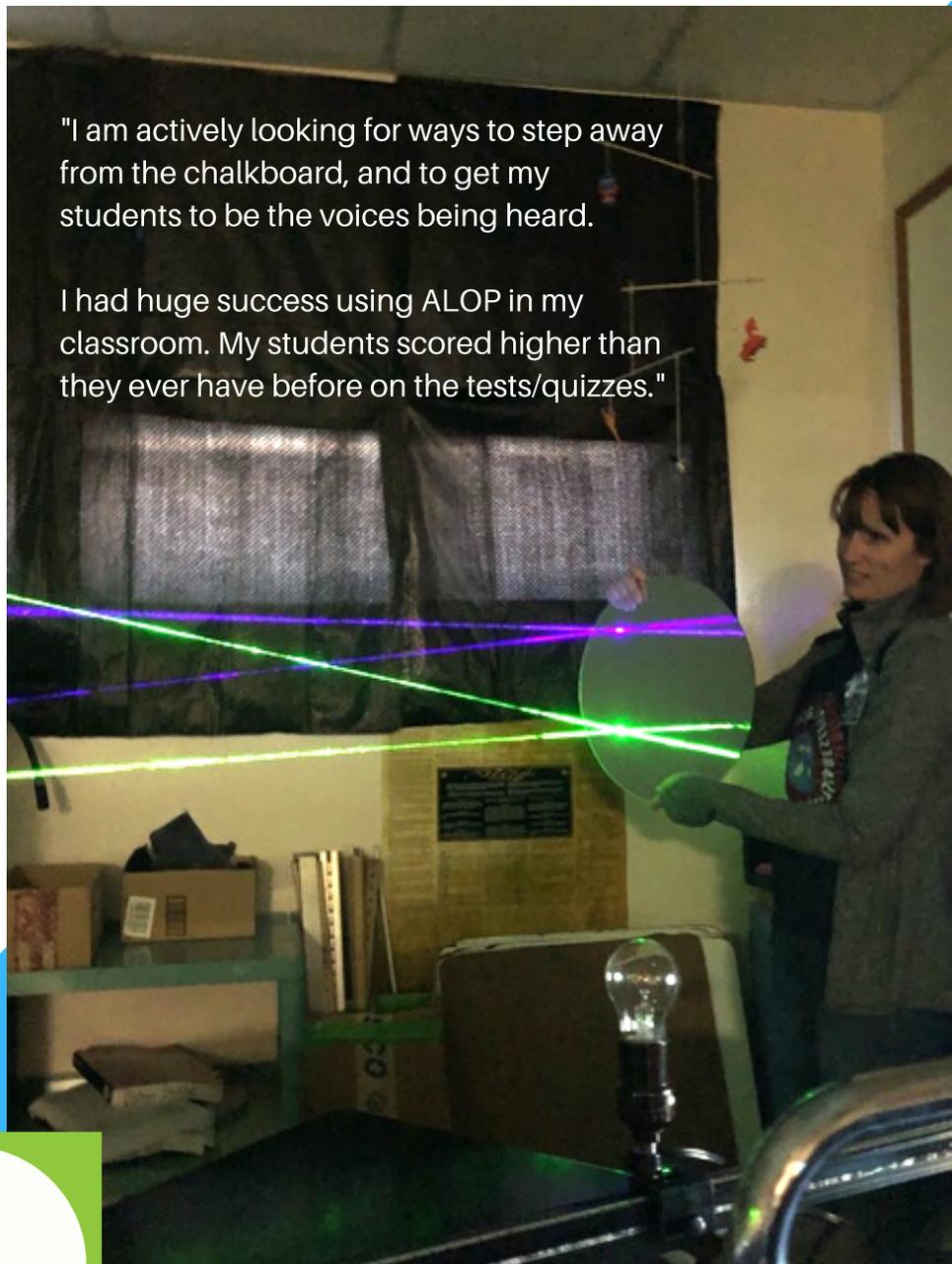




Lynn Jorgensen is a high school physics teacher in Arizona, USA. She embraced the teaching ideas and approaches presented by ITEN Teacher Fellow Workshop.

ITEN Teacher Fellow and physics teacher Lynn Jorgensen uses the approaches inherent in **Active Learning in Optics and Photonics (ALOP)** to engage her students in minds-on, hands-on activities that help uncover student ideas.



"I am actively looking for ways to step away from the chalkboard, and to get my students to be the voices being heard.

I had huge success using ALOP in my classroom. My students scored higher than they ever have before on the tests/quizzes."

4

Days

...of workshops in Active Learning in Optics and Photonics presented by Dr. David Sokoloff (USA), Dr. Ángela Guzmán (Colombia/USA), and Dr. Omar Ochoa (Bolivia), with funding from the International Center for Theoretical Physics in Trieste, Italy.

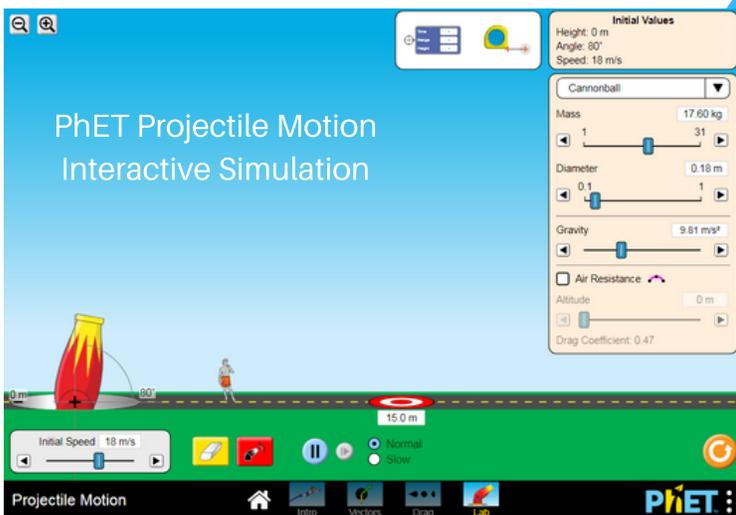
Lynn demonstrates how concave mirrors direct light (purple and green laser beams) to a common focal point.



"I have found myself to be an advocate for strengthening our science philosophy within our district to find ways to make science accessible to all, while also maintaining the rigor needed."

Lynn takes what she saw in the workshop and expands it beyond optics alone.

Lynn explains how she incorporated a PhET Simulation from the University of Colorado-Boulder, and then used ALOP-inspired approaches to teach about projectile motion with a single launcher.



"I had **students making predictions** about time, velocities, distances (when shot at angles). Then we ran data, and **they had to either justify their correct predictions, or find and make the needed corrections.** They were using whiteboards at every step. I liked that we could use one pricey item for the whole class."

"It takes a lot of effort to stick with **letting the students lead the investigations.** Clear expectations on time sharing and taking turns is essential."