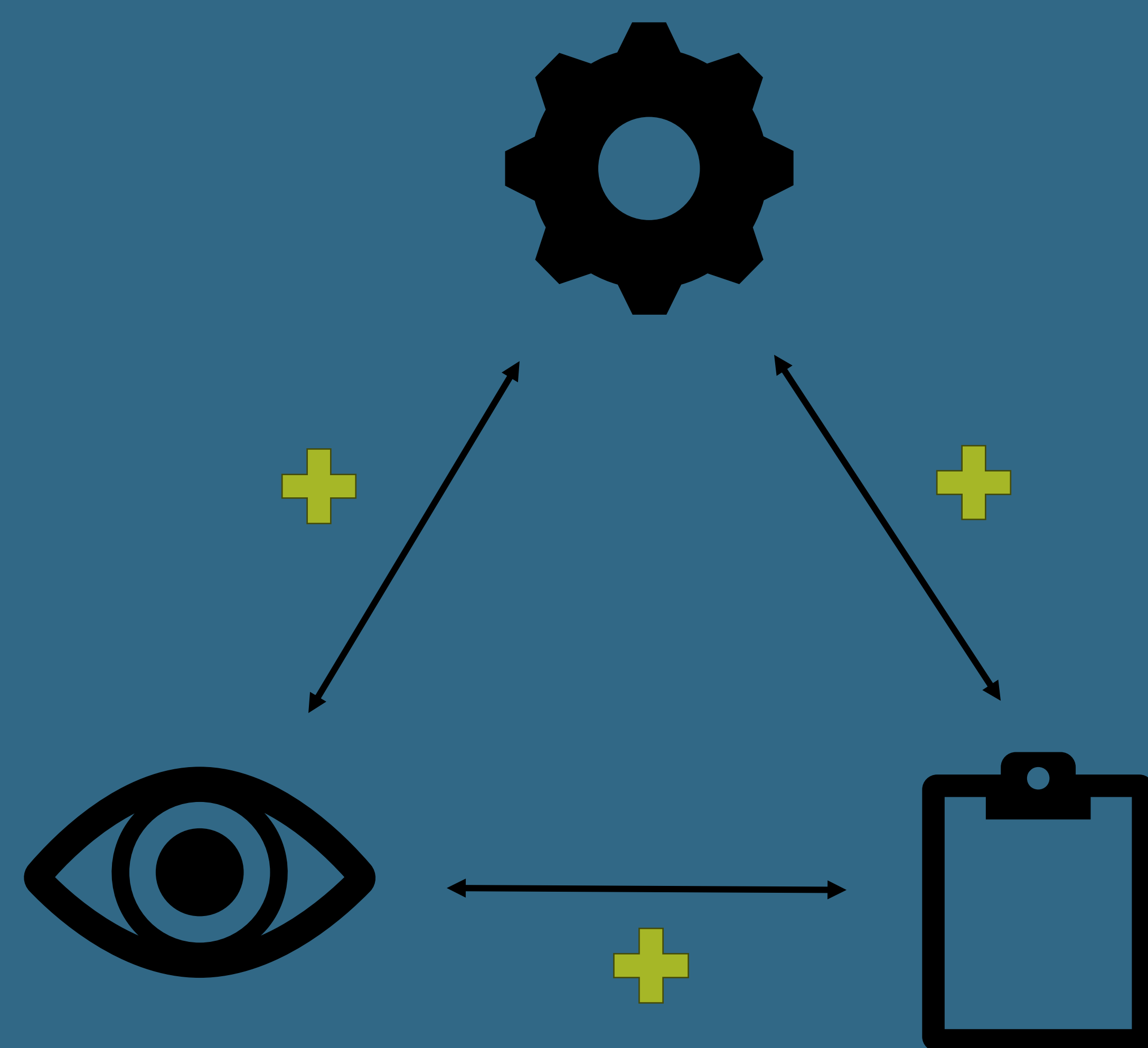


Participants implement what they learned from **online** professional development

Jenny Valadez Fraire, Tim Archie, Sandra Laursen & Kyra Gallion



Observations and surveys show that online workshops support implementation

Need

Professional development (PD) workshops have been found to effectively increase undergraduate math instructors use of research-based instructional strategies¹.

Benefits of online PD

- Under-resourced institutions
- Instructors with young families
- Environmental impact of travel

Workshops

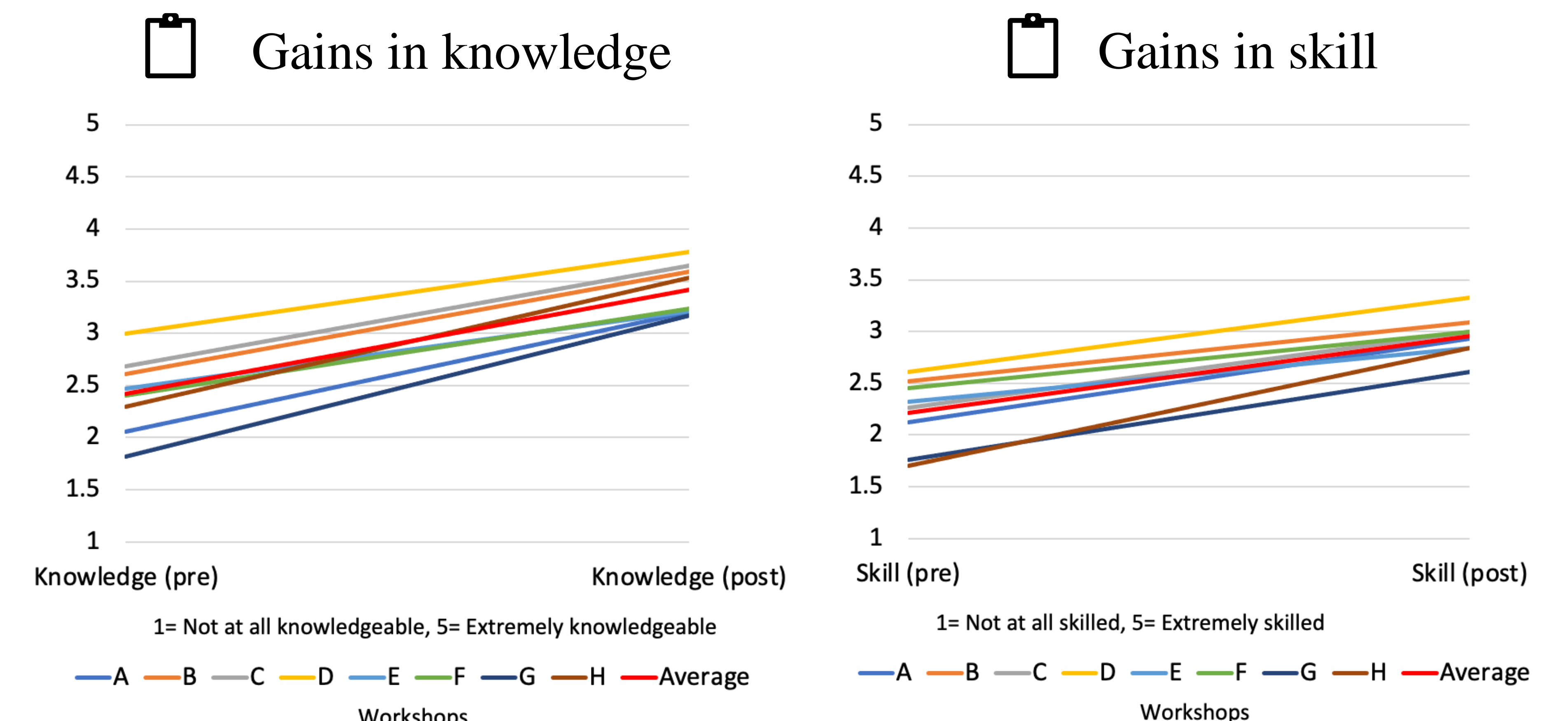
During the Summer of 2022, the Mathematical Association of America (MAA) sponsored a set of eight virtual PD workshops to address these needs.

Workshop Features

- Facilitators participated in Winter trainings based on PD best practices <http://tinyurl.com/2p83ayry>
- Conducted via Zoom in two formats: one week intensive model & mini course spread over three weeks
- 25 participants / workshops through 24-27 contact hours

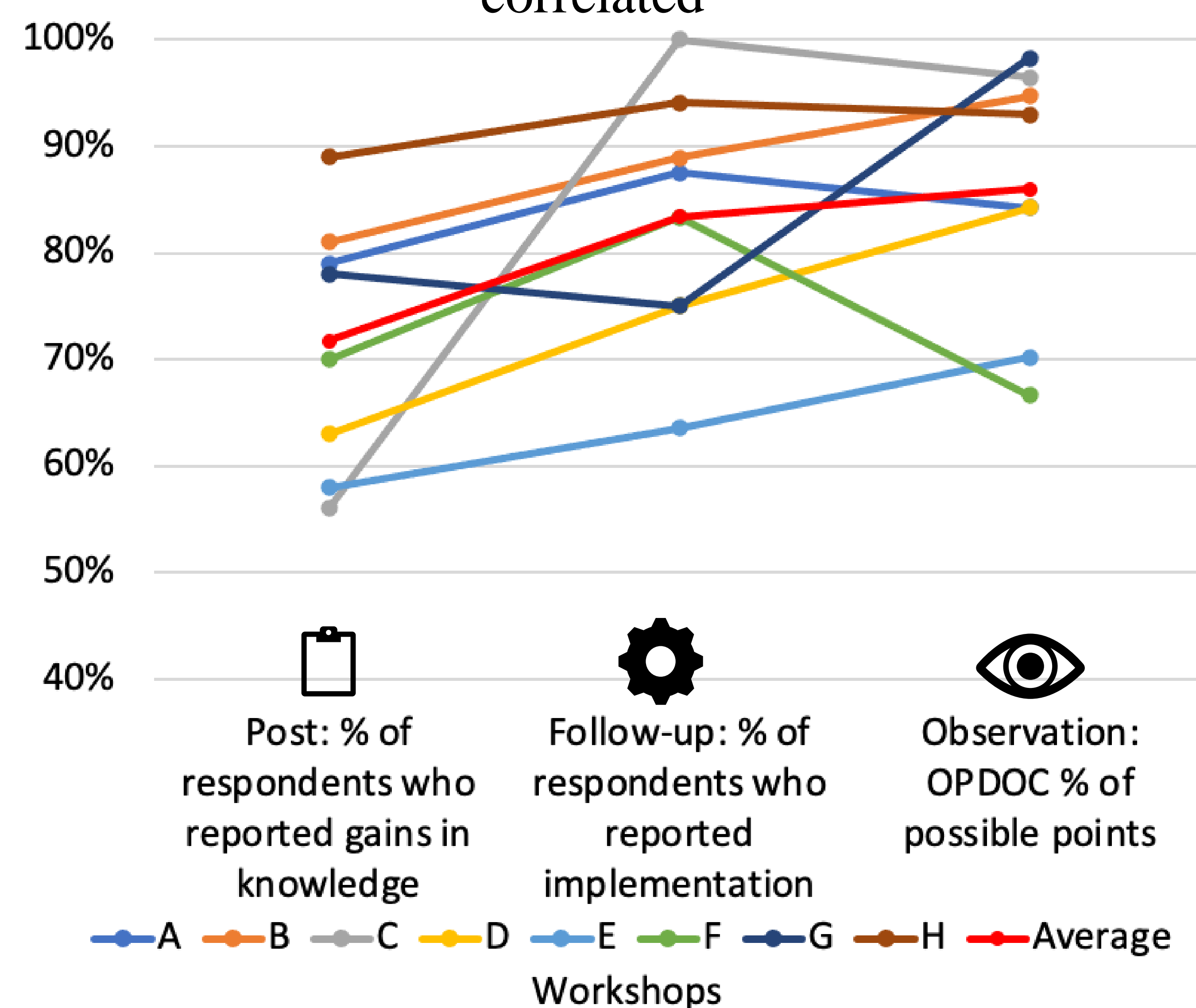
Method

- Pre survey and Post Survey**
Instructors' current capacities (knowledge, skill, attitude and motivation) related to the workshop topic
- Online Professional Development Observational Checklist (OPDOC)**
19 item rubric that assesses workshop features and provides a quantitative score (<https://tinyurl.com/27tcrhe6>)
- 119 out of 203 instructors who completed workshops responded to all three surveys
- Follow Up Survey**
Implementation at one year



Results & Discussion

Workshops gains, implementation, and observations are correlated



Takeaways

Overall, participants rated the workshops favorably and reported strong gains in knowledge and skills related to the workshop topic.

- Most helpful workshop features included: supportive atmosphere, interactions with others, practical examples, facilitator modeling and collaborating (working & connecting) with other participants
- 83% indicated they would likely implement what they learned in the workshop.
- 84% of respondents reported some degree of implementation at the one-year follow up.
- The high degree of implementation reported by participants is comparable to implementation after face-to-face workshops (Archie et al., 2022), helping to indicate that high quality online PD can be a more accessible form of PD.

References

Archie, T., Hayward, C. N., Yoshinobu, S., & Laursen, S. L. (2022). Investigating the linkage between professional development and mathematics instructors' use of teaching practices using the theory of planned behavior. *Plos One*, 17(4), e0267097.

Daly, D., Ethnography & Evaluation Research, and the Academy of Inquiry Based Learning (2021, June). *AIBL Handbook for Online Professional Development: Lessons Learned from PRODUCT Workshops*. Boulder, CO, and San Luis Obispo, CA: University of Colorado Boulder, Ethnography & Evaluation Research; and Academy of Inquiry Based Learning.

<https://tinyurl.com/AIBLHandbook>

Acknowledgments

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