

2021 DRK-12 PI Meeting

DATA SCIENCE EDUCATION AND DATA LITERACY IN PRE-K-12 EDUCATION

The participants discussed the challenges and promising strategies for teaching data science and data literacy, interdisciplinary considerations, teacher preparation and supports, and assessment. The participants discussed the broad vision for student learning, noting that while it can be developed through multiple disciplinary pathways, it goes back to mathematics education research and work around numeracy, number sense, and quantitative reasoning. The participants also discussed the challenges of interpreting graphs where values move along a number line, understanding context, and the overlap between CS education and data literacy education. In terms of interdisciplinary considerations, the participants discussed the challenge of curricular and school structures, how different disciplines consider what counts as evidence, and the importance of data scientists being content experts. Related to teacher preparation and support, the participants discussed the challenges of teachers not being comfortable with statistics and the need for building teacher collaborations.