

Piloting a New Assessment Tool for Data Science Education Researchers

Motivation

- Introductory data science (IDS) growing
- Quality assessment tools needed with rigorous development for research use

Progress

- (Fall 2020) Test blueprint
 - Reviewed syllabi & resources used by experienced IDS instructors and established courses
- Drafted & revised 48 candidate items
- (Spring 2022) Structured interviews
 - Experienced IDS instructors with expertise in Stat Ed, CS Ed, and/or Ed Measurement
 - Gathered holistic feedback as well as detailed critique of each item and its contribution
- Welcoming CS perspective
 - e.g., best practices for language agnostic assessment of algorithmic thinking (for data preparation / analysis)
 - Seeking participants to classroom test

Goal: Welcome feedback and invite field test participation among colleagues in the SIGCSE network



Research Team

Duke University

- Mine Çetinkaya-Rundel
- Maria Tackett
- Evan Dragich

University of Minnesota

- Andrew Zieffler
- Chelsey Legacy

University of California, Irvine

- Mine Dogucu

Penn State University

- Matthew Beckman

Assessment Tool

Made available by request

Matthew Beckman
Associate Research Professor
Department of Statistics
mdb268@psu.edu



PennState