

Data Science for All: Data Literacy in Communities of Need

On March 7, 2019, the New York Hall of Science hosted a community-based workshop supported by the Northeast Big Data Innovation Hub that brought together representatives of diverse urban community groups and nonprofits, K-12 students and teachers, lifelong learners, and professionals. The workshop focused first on defining the needs within underserved communities and community service providers for increased awareness of the importance of data literacy, and how data science might be applied to address intractable problems within these communities. The second objective was to collaboratively develop an actionable plan for how to address these needs.

Participants proposed novel solutions for some of our fundamental challenges related to the use of data to address social problems, including how to motivate communities to apply data science in ways that promote their own agency, and using data to close gaps between community needs and the services currently offered.

Ultimately, workshop participants generated three actionable ideas:

- 1) Trainings to assist community organizations with easy-to-use and creative data collection and analysis;
- 2) A core competencies framework; and
- 3) A short video on responsible data science.

Key takeaways:

- For developing a data literacy competency framework, first make sure to have an agreed upon definition of terms.
- Use findings from this workshop and a previous workshop with the American Library Association to develop a white paper describing gaps and suggesting next steps for the field.
- Use the white paper to engage the broader community and get feedback around common language and concise ideas about what data literacy means. Make a clear case for the work that is needed and use the white paper to secure subsequent funding for implementation of the action plan.
- Consider how to approach a research and development process for data literacy and competencies.