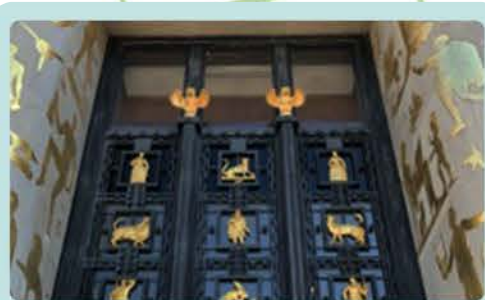# DATA LITERACY WITH, FOR, AND BY YOUTH

EXPLORING HOW TEENS CO-DESIGN AFTER-SCHOOL PROGRAMS AS SITES OF CRITICAL DATA PRACTICE

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Pratt Institute

Community Partner:
Brooklyn Public Library
Teen Services

PROBLEM ADDRESSED BY THIS PROJECT:

Today's young people have a personal stake in their ability to function with data. Future job prospects might hinge on their ability to participate in the new data economy. But equally, young people are themselves the subjects of data. The datafication of young people's lives leads to profound questions about childhood, technology, and the equity of access to STEM learning around data, one of which is this: How might young people be empowered in a data-centric world?

GOALS:

The project aims to develop a model for youth-led learning data literacy at the public library.

INTELLECTUAL MERIT:

The project has the potential to deliver a transformative model for learning about data literacy in informal, community-based STEM environments like the public library.

BROADER IMPACTS:

Understandings derived in this study have the potential to inform the public's ability to make decisions about data at school, at work, and across everyday life, as well as providing a model of the best practices in the field of informal STEM learning.
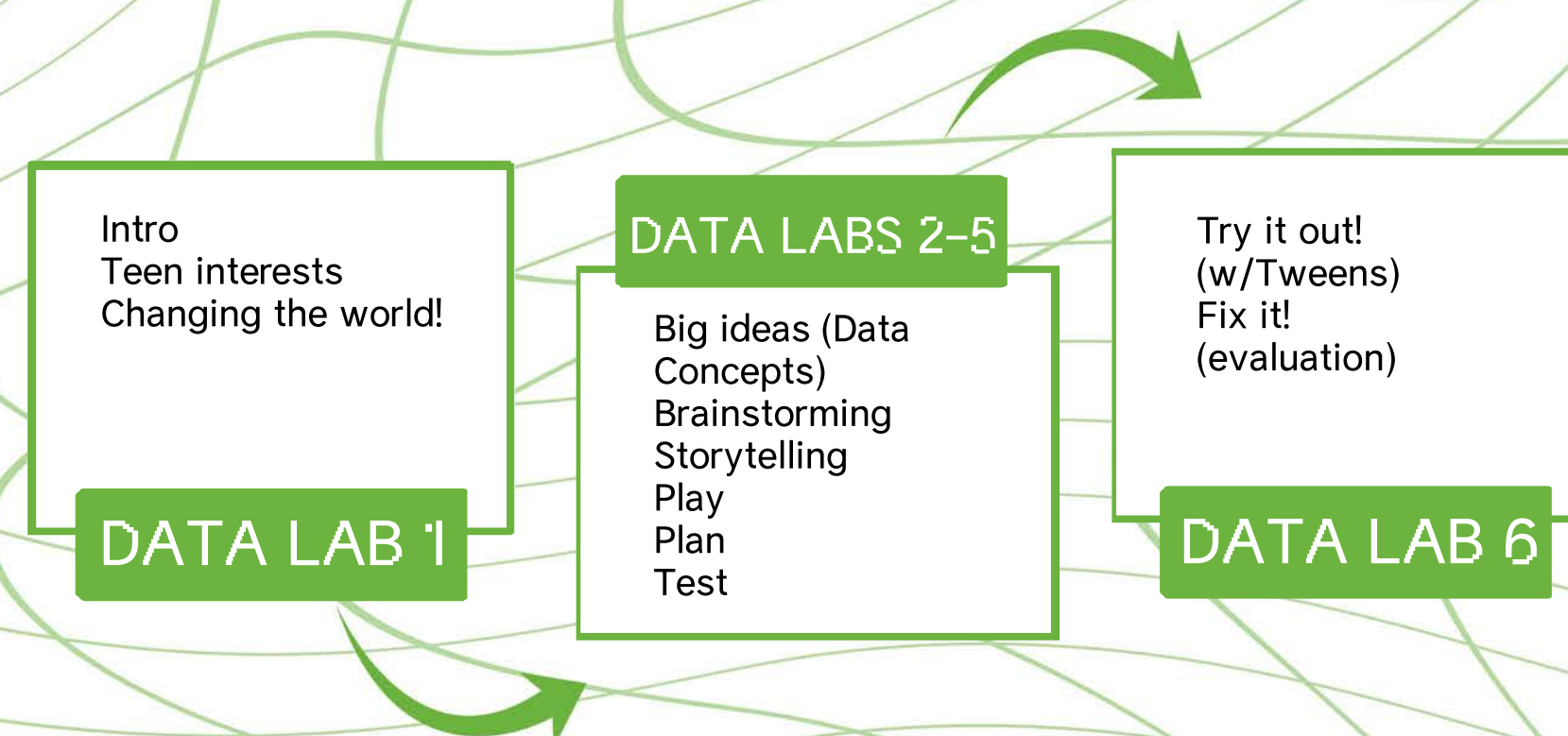
PROJECT ACTIVITIES TO DATE:

We are at the start of Year 2 of the project.
During Year 1, we:

■ Completed 10 online design sessions in total via Zoom (41 participants: including 30 teens, 4 librarians, & 5 Pratt students)

■ Due to COVID-19 restrictions, the study was conducted online using a wide range of digital tools

■ Completed first phase of data analysis, around three themes: co-design with youth, critical data literacy, and engagement w/data (interest and motivation)

■ Created resource materials for teens and librarians (An "idea book" providing inspiration for data literacy activities)

NEXT STEPS:

■ Run additional design sessions with teens

■ Papers and presentations for scholarly and professional conferences

■ Create Research Practice Briefs for the NSF

■ Refine practice guidelines in support of data literacy at the library

■ Build a conceptual model of co-design with youth in support of engagements with data in informal learning environments

Intro
Teen interests
Changing the world!

DATA LAB 1

DATA LABS 2-5

Big ideas (Data Concepts)
Brainstorming
Storytelling
Play
Plan
Test

Try it out!
(w/Tweens)
Fix it!
(evaluation)

DATA LAB 6

Co-Designed Data Products Produced by Teens

1) Bowler, L., Wang, K., Lopatovska, I. & Rosin, M. (Accepted). The Meaning of "Participation" in Co-Design with Children and Youth: Relationships, Roles, and Interactions. ASIST21 Annual Meeting, October 31 – November 2, 2021.
2) Wang, K. (2021). Youth Data Literacy: Resources for Programs & Activities. New York, NY. Available on the Resources page of the project website: https://sites.google.com/pratt.edu/data-activism-for-youth/resources

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