COVID-Inspired Data Science Education through Epidemiology (CIDSEE)

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Project Type: Developing and Testing Innovations

Project Overview: To date, over 650 underserved youth nationwide have engaged in a 20-hour out-of-school multimedia "Data Detectives" program centered on a project-developed adventure book, *The Case of the COVID Crisis*, which is integrated with data activities, modeling, animations, and career exploration.

Through a compelling narrative and accessible data tools, middle school youth engage with disease data and develop interest in epidemiology, health/public health, and data science.

Lessons Learned & Insights Gained

Our project demonstrates the potential of afterschool and summer programs for immersing underserved youth in contemporary, relevant, and cutting-edge STEM. We show the power of narrative to convey scientific ideas and motivate youth to learn about epidemiology (and related careers). We have seen that youth can master the use of data tools when used in a compelling context.

Equity

Our implementation partner Imagine Science supports afterschool and summer camp STEM programming at YMCA, Boys and Girls Clubs, Girls, Inc., and 4-H programs in diverse, low-income communities in several states. These youth are underserved with respect to STEM.

New Challenges & Next Steps

With the development of COVID vaccines and the rise of variants, we have needed to modify book chapters and activities. In the coming year, we will need to put considerable effort into making our materials relevant to youth in a world that is increasingly returning to pre-pandemic ways of living. We will also explore how the program can be adapted for classroom use.