

United States Senate

WASHINGTON, DC 20510

May 25, 2022

The Honorable Patrick Leahy
Chairman
Senate Appropriations Committee
Washington, DC 20510

The Honorable Richard Shelby
Vice Chairman
Senate Appropriations Committee
Washington, DC 20510

The Honorable Patty Murray
Chairwoman
Senate Appropriations Subcommittee on
Labor, Health and Human Services,
Education, and Related Agencies
Washington, DC 20150

The Honorable Roy Blunt
Ranking Member
Senate Appropriations Subcommittee on
Labor, Health and Human Services,
Education, and Related Agencies
Washington, DC 20510

Dear Chairman Leahy, Vice Chairman Shelby, Chair Murray, and Ranking Member Blunt:

As you develop the fiscal year 2023 Departments of Labor, Health and Human Services, and Education and Related Agencies Appropriations bill, we urge you to consider efforts to enhance equitable access to, and the quality of, data science education to ensure all students keep pace with the needs of our increasingly data-centric world. We recommend investing an additional \$60 million to spur the development and implementation of effective interventions to support data science education. Specifically, we request an additional \$40 million for the Institute of Education Sciences (IES) and an additional \$20 million for the Education Innovation and Research Program.

More resources can accelerate ongoing efforts to increase access to data science and data literacy instruction and increase capacity to identify and develop effective data science interventions, especially for low-income students and students with disabilities. Despite the importance of subject-area context in data science applications, there are not enough initiatives to teach data science and data literacy. Because of this limited research understanding and lack of high-quality instructional content, access to high quality data science and literacy instruction is limited.

We request a robust increase in funding for the Institute for Education Sciences. Of that funding, we recommend dedicated funding for data science research to identify and scale research-based interventions to support data science and data literacy development among teachers and students, especially among underserved populations. These funds could be used to launch a special topic on data science or data literacy within the Education Research Grants Program and Special Education Research Grants Program, fund research to increase accessibility of interventions, and/or launch a high school challenge to directly engage students in data science.

An additional and significant limiting factor is the lack of teacher preparation for addressing data-related concepts. Very few programs exist at the in-service or teacher


preparation level to help teachers gain needed knowledge, skills, and confidence. The Department of Education can play an essential role in the development and scale of effective programs across disciplines. Additional investments would help spur the design of effective data science interventions for instruction and professional development.

Thank you very much for your attention to our request. We are hopeful that a new commitment to teaching data science and data literacy will spur innovation and opportunity, prepare students for the workforce of tomorrow, and support all students as they engage in the data-centric world.

Sincerely,



Alex Padilla
United States Senator



Sherrod Brown
United States Senator



Cory A. Booker
United States Senator