



The Faculty Development and Student Engagement in Data Analysis (FDSEDA) Project: Building Capacity in Numeracy among Underrepresented Students

**Applications are rolling
Compensation:
\$4,500 (over five years)***

The Faculty Development and Student Engagement in Data Analysis (FDSEDA) Project **An Invitation to CUNY Faculty**

Numeracy or Quantitative reasoning is “the ability to understand and use numbers and data in everyday life”¹ and “a habit of mind, competency, and comfort in working with numerical information.”²

Quantitative reasoning (QR), the contextualized use of numbers and data in ways that involve critical thinking, is widely recognized as an essential competency for college graduates. Poor QR skills adversely affect job prospects and can lead to potentially harmful decisions. Conversely, strong quantitative skills promote academic success, bring advantages on the job market, and allow individuals to participate more fully in civic life. Skills such as the ability to describe, compile, analyze and present numeric information can prepare students for meaningful employment and conscientious citizenship. Data analysis is central to the work of governments, corporations, and nonprofit organizations, and quantitative research capabilities are valued within the STEM disciplines as well as in allied fields such as marketing and education.

We invite you to participate in our Faculty Development and Student Engagement in Data Analysis Project (FDSEDA)! This initiative is an NSF-funded project to train faculty in strategies for teaching students data analysis. Faculty selected for participation into our program will attend a two-day training program at Lehman College (Bronx, NY) in summer 2021 or 2021 to learn about and practice strategies for teaching data analysis! At the workshop, they will develop instructional materials that incorporate these tool and participate in a collaborative community providing peer feedback on the instructional materials and support. In subsequent years (years 2-4), they will assess the effectiveness of this intervention using both pre- and post-tests (provided to faculty). The structure of our research design requires that faculty teach sections of the same course in consecutive years both with and without the data analysis research intervention (DARE) for four consecutive years. In addition to administering the assessments and participating in our evaluation activities, CUNY faculty will also be expected to take a leadership role on their home campuses in promoting the FDSEDA project (e.g., providing demonstrations to colleagues) and to support non-CUNY faculty who participate in summer workshops. There are no prerequisites for entry into our program and our initiative is open to faculty from across the curriculum, including those who do not have quantitative backgrounds and/or have never undertaken data analysis with their students!

FDSEDA Requirements

The FDSEDA Program is open to CUNY faculty who express a commitment to infusing data analysis into their instruction and to participating in assessment activities. FDSEDA faculty must also commit to playing a leadership role on their home campuses in disseminating the FDSEDA initiative.

To be considered for this program, faculty must agree to:

- Attending a two-day summer workshop that will train faculty in best practices for quantitative reasoning instruction (in either 2021 or 2021). The workshop will be in-person if possible, but if necessary will be held virtually and synchronously.
- Developing instructional materials that engage students in primary data analysis and that teach students fundamental QR skills, with an emphasis on descriptive statistics (using Excel to prepare tables and graphs, etc.).
- Selecting one course that they will target for the infusion of data analysis. This must be a course that they teach every fall semester and the faculty must commit to teaching the course four times over the course of the project— two times with infusing data analysis and two times without.
- Commit to fully participating in assessment activities and to coordinating compensation for participating students.
- Participate in an online community of faculty committed to quantitative reasoning instruction and assist in the summer training of non-CUNY faculty during summer workshops.

How to apply?

- Please complete the online application at your earliest convenience (we have selected our CUNY faculty, but may have a few additional spots)
- Please note that participation in FDSEDA is strictly voluntary!

For more information, please contact the Principal Investigators (PIs) on this project:

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¹Madison, Bernard L. 2003. “The Many Faces of Quantitative Literacy.” Pp. 3-6 in *Quantitative Literacy: Why Numeracy Matters for Schools and Colleges*, edited by Bernard L. Madison and Lynn Arthur Steen. Princeton, NJ: National Council on Education and the Disciplines.

²Steen, Lynn Arthur. 2004. “Everything I Needed to Know about Averages I Learned in College.” *Peer Review* 6(4): 4-8.