



## 2021 National Assessment of Educational Progress (NAEP): Process Data Summer Training Series

### Application Instructions

#### OVERVIEW

The National Assessment of Educational Progress (NAEP) is required to provide a fair and accurate measurement of educational achievement in several subject areas. The NAEP program has a long history of bringing innovation to large-scale assessment and providing training opportunities to expand the community of statisticians, psychometricians, and educational researchers who work with NAEP data. The increase in the amount of data created through online digital learning and digital assessments, commonly called “process data,” which reflects students’ interactions with the assessment and the system, leads to an opportunity to further understand, expand, and explore what we know about what students know and can do. A joint effort by NCES and the American Institutes for Research (AIR) to introduce NAEP process data, as well as examples of appropriate analytical methods to handle the data, is provided in this summer training series.

#### NAEP PROCESS DATA TRAINING SERIES

The 2021 NAEP Process Data Summer Training Series will take place during three virtual sessions on **August 20, August 27, and September 3, 2021 from 12pm – 3pm ET**. This training series is for quantitative researchers with strong statistical and programming skills who want to learn to conduct data analysis using NAEP process data. The summer series is aimed at advanced graduate students, educational researchers at universities or other research organizations, analysts from state and local education agencies, and those interested in analyzing large-scale assessment and process data, such as NAEP’s. The summer series will introduce the unique features of NAEP process data and provide guidance and practice in basic and advanced data analysis methods when using NAEP process data.

Using data sets that mimic the actual data from NAEP 2017 Grade 4 Mathematics assessment, the summer series will consist of hands-on practice sessions built on a theoretical background in analyzing NAEP data using the R program. During the summer series, participants will:

- Be introduced to NAEP assessments and NAEP process data;
- Learn the basics of analyzing of NAEP process data;
- Go through guided examples of complex analysis using NAEP process data; and
- Hear about the challenges facing NAEP and opportunities in NAEP operations and research.

## TERMS OF ATTENDANCE

There is no fee to attend the workshop. Attendance is mandatory. Accepted applicants are expected to be on time and join all three virtual sessions. Please note the following, and consider your schedule when applying:

- If you are more than 15 minutes late to a session you will be dropped.
- Missing the first or any session will exclude you from attending subsequent sessions.

## QUALIFICATIONS

Applicants should have a solid understanding of NAEP and NAEP assessments, know statistics, and be familiar with some topics in advanced analysis methods, such as clustering and sequencing. Please note that R will be used during the training activities, so participants are expected to be able to use R to perform data analysis. Please note that no programming support will be provided.

## TIMELINE

Application Period: Opens July 19 and closes August 13 at 11:59 pm EST.

Space is limited. Notifications to accepted applicants will be sent no later than August 18. Upon notice of acceptance to the training you will need to respond within 24 hours with confirmation of your ability to attend all three training days.

## APPLICATION SUBMISSION

To submit an application, please visit <https://naep-research.airprojects.org/Process-Data-Training> and click on the “Start Application” button.

The information and materials you will need to provide are described below. An asterisk (\*) indicates that the information is required.

	Field(s)	Description
*	First and last name	
	Middle initial	
*	Company or institution	Provide the company name where you work or institution name if enrolled in school.
*	Job title	Please include the title of your current position (e.g., Student, Researcher).
*	E-mail address	Use the e-mail where you wish to receive notifications about the NAEP Data Training Program.
*	Software experience	Please rate your level of software experience:  First row will be R, and applicants can mark their level of programming experience using the descriptions below.  Second row will be “Other (e.g., STATA, SAS, Python)”, and applicants can mark their level of programming experience using the descriptions below.  <b>Beginner</b> - Can run provided code. Has difficulty adapting code or fixing unexpected errors.

	Field(s)	Description
		<p><b>Intermediate</b> - Can write your own code. Has difficulty fixing errors and is time consuming.</p> <p><b>Advanced</b> - Can write and troubleshoot your own code. Comfortable with new packages.</p>
	Race/ethnicity	You may choose all the response options that apply. The options are American Indian/Alaska Native, Asian, Black, Hispanic, White, and Other.
	Gender	
*	Statement of Interest	<p>Upload a statement of interest describing:</p> <ul style="list-style-type: none"> <li>• your purpose for applying to the training;</li> <li>• what you hope to get out of the training; and</li> <li>• your level of experience with your primary software.</li> </ul> <p>For planning purposes, please also include the name of the city, state, and country (e.g., Arlington VA, United States; Paris France) from which you will be joining the training.</p> <p>Requirements: PDF or MS Word format. 300 words maximum.</p>

**EVALUATION**

Applications will be evaluated on the following criteria:

- the potential for both applicants and NAEP to benefit from applicants’ participation; and
- applicants’ knowledge and skills in data analysis and programing in R.

If you have questions about the data training workshop or difficulty using the application site, please contact us at [NAEP\\_RD@air.org](mailto:NAEP_RD@air.org).