PEERS AIMS AND ASPIRATIONS

DISCOVER

CONNECT

LEARN

www.peersdatahub.net
Data Discovery through PEERS

What is your next research project?

Search archives for publicly available datasets from studies such as the Measure of Effective Teaching and Mathematics Teaching in the 21st Century, just to name a couple.

PEERS Data Hub is a partnership between AERA and ICPSR.

www.peersdatahub.net
Search over 15,000 ICPSR studies
Canned searches
Data by type
Archives and databases

www.peersdatahub.net
Discovering through Data

New PEERS Data Hub – An Introduction

Discover Data by Type

<table>
<thead>
<tr>
<th>General Population Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• General Social Survey</td>
</tr>
<tr>
<td>• Current Population Survey</td>
</tr>
<tr>
<td>• Office of Civil Rights (OCR) 2015-2016 data collection</td>
</tr>
<tr>
<td>• Equality of Opportunity Project</td>
</tr>
<tr>
<td>• National Center for Education Statistics (NCES) Private School Universe Survey (PSUSS)</td>
</tr>
<tr>
<td>• National Student Loan Data System (NSLDS)</td>
</tr>
<tr>
<td>• National Student Postsecondary Student Aid Study (NSPSAS)</td>
</tr>
<tr>
<td>• U.S. Census Bureau American Community Survey (ACS) 5-year estimates</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Context Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Public Elementary-Secondary Education Finance Data from the Census Finance Survey (FF-31)</td>
</tr>
<tr>
<td>• School Attendance Boundary Information Systems (SABINS)</td>
</tr>
<tr>
<td>• School Attendance Boundary Survey (SABS)</td>
</tr>
<tr>
<td>• School Survey on Crime and Safety (SSOCS)</td>
</tr>
<tr>
<td>• National Center for Education Statistics (NCES) Common Core of Data (CCD)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• International Association for the Evaluation of Educational Achievement (IEA) Trends in International Mathematics and Science Study (TIMSS)</td>
</tr>
<tr>
<td>• Programme for International Student Assessment (PISA)</td>
</tr>
<tr>
<td>• Teaching and Learning International Survey (TALIS)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Early Childhood and K-12 Longitudinal Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Head Start Impact Study</td>
</tr>
<tr>
<td>• National Center for Education Statistics (NCES) Early Childhood Longitudinal Study (ECLS)</td>
</tr>
<tr>
<td>• National Center for Education Statistics (NCES) Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K)</td>
</tr>
<tr>
<td>• National Center for Education Statistics (NCES) National Education Longitudinal Study 1988 (NELS:88)</td>
</tr>
</tbody>
</table>

- Hard to find datasets
- Longitudinal studies
- STEM Education specific data

www.peersdatahub.net
Discovering through Data

Find suitable data through the hub

Tips on how to explore

www.peersdatahub.net
Discovering through Data

Research question informs types of data needed

Some questions require very specific data types:

- Comparison over time (study design and method: repeated cross-section)
- Change over time (study design and method: longitudinal)
- Subgroups (sampling: oversample)
- Data from multiple sources (e.g., teacher, parent, child)
- Data about states, communities, organizations, schools, school district, etc.
The National Study of Learning Mindsets, [United States], 2015-2016 (ICPSR 37353)

Version Date: Jul 27, 2020

Principal Investigator(s):
David S. Yeager, University of Texas at Austin

https://doi.org/10.3886/ICPSR37353.v3

Version V3 (see more versions)

At A Glance
Data & Documentation | Variables | Data-related Publications | Export Metadata

Project Description
Scope of Project
Methodology
Version(s)

Notes
- The public-use data files in this collection are available for access by the general public. Access does not require affiliation with an ICPSR member institution.
- One or more files in this data collection have special restrictions. Restricted data files are not available for direct download from the website; click on the Restricted Data button to learn more.
CONNECTING AND COMMUNITY BUILDING OVERVIEW

- PEERS INTERACTIVE RESEARCHER GALLERY
- PEERS PODS
- FILL OUT THE FORM (quick and easy!)
- PEERS CONNECTING QUESTIONS TO ANSWERS
- PEERS PODCASTS

www.peersdatahub.net
WHY JOIN?

o The gallery is the place to introduce your “research self” to others. Create your own narrated web-based overview of your research interests and work.

o Find other researchers of interest studying STEM education.

o Schedule chat times or virtual meetings; it is engaging, user friendly, and easy to do.

o The gallery is the HUB’s way of providing virtual space to support building new and inclusive communities and connecting to others well beyond your own teams and networks.

www.peersdatahub.net
**Introduce yourself**

*Hi, I am . . . however you would put it to be comfortable in saying who you are and where you are from.*

**Might say a few words autobiographically about your professional self, such as:**

*I taught high school physics before getting my doctoral and university xx.*  
*I also worked in the stem learning center and focused on video analysis.*

**Here and now – what are your primary areas of research, your scope of interest?**

*What are your current research interests and general scope of work?*

*Current key study or studies underway – briefly what populations, what data (if data bases are extant, say so), general methods/modes of inquiry.*

**If there are ways you might be interested in connecting – say so**

*I have been focused on state administrative data and would love to connect with other researchers doing so.*  
*I have primarily been involved in doing surveys on undergraduate mathematics learning, but would very much like to connect to researchers doing experimental or observational work. Send me a message if you have similar interest.*

**Any takeaways?**

*Be yourself . . . you can update and schedule meetups as the gallery unfolds.*

Meet Krystal Williams (University of Alabama) in the gallery  
CONNECTING AND COLLABORATING – *PEERS Pods*

Connect to your peers in a pod organized around shared research topics, methodological approaches, goals, or identities. Support one another and improve your research.

**PICK YOUR POD**

- Working Group on State Longitudinal Data Systems (SLDS)
- Working Group on Race, Inclusion, and STEM Education
- Working Group on LGBTQ+ in STEM Education
- Data and Research Analysis Working Group
- Research Writing and Communications Working Group

**PROPOSE A POD**

A PEERS resource person to support your interests is only a step away!
CONNECTING AND COLLABORATING – a quick google form and go!

www.peersdatahub.net

You can participate in the Interactive Researcher Gallery and meet up with others, join a Research Pod, or both. Fill out the information below so that you can get to where you want to go. You'll receive an email confirmation; please save it in order that, in the future, you can add options and change your preferences.

Required fields will permit us to contact you. We encourage you to complete all items, so that we can serve you better using the searchable functions.

* Required

- Email address
- First name
- Last name
- Institution/Organization

Country
Choose

Highest Degree Confirmed
- Ph.D.
- Ed.D.
- Professional Doctorate (e.g., JD, LLB, MD, PsyD, DLit)
- Master’s
- Professional Master’s (e.g., MRA, MOW, MPA, MPH)
- Bachelor’s
- Associate’s
- Other:

Year of Degree (YYYY)
Your answer

PEERS Pods are research working groups on specified topics with expert leader participation. Would you be interested in joining a...

- Working Group on State Longitudinal Data Systems (SLDS)
- Working Group on Race, Inclusion, and STEM Education
- Working Group on LGBT+ in STEM Education
- Data and Research Analysis Working Group
- Research Writing and Communications Working Group

Suggestions for a PEERS Pod
Your answer

Please tell us about your primary area of research interest (select up to three; select at least one). Please select a first one here.

Choose

Please select a second area of research interest, if you wish.

Choose

Please select a third area of research interest, if you wish.

Choose

Thank you for your interest in participating in the PEERS Hub community. You will be hearing from us soon.

The PEERS Team

Send me a copy of my responses.
Connect your questions to where you can find answers?

The PEERS Hub is not just a place to find data that meets your needs, but to have user friendly access to answers through:

- Your peers and
- The two primary primary STEM statistical agencies—NCES and NCSES

www.peersdatahub.net
A regular podcast series with STEM researchers, funders of research, policy leaders committed to fundamental (ECR-CORE) investment.

FIRST PODCAST, OCTOBER 2020
  o Book talk with Dr. Ebony McGee, Vanderbilt University
    Member, PEERS Hub Advisory Board

FUTURE INTERVIEWS
  o Hear from education researchers across career stages, arenas of inquiry, methodologies and methods, personal stories.
  o Get a no-nonsense perspective on how to get funding for an early-career stage STEM research program.
  o Learn what journal editors are seeing in submissions during this COVID-19 time – are women falling behind?

Podcast Recommendations aera-icpsr-peers@aera.net
PEERS LEARNING AND CAPACITY BUILDING OVERVIEW

PEERS PROFESSIONAL DEVELOPMENT

- PEERS Methods Series
- PEERS Series in STEM Data and Data Use
- AERA and ICPSR Training
- PEERS Open-Access STEM Article Repository
- PEERS Dedicated Resources for STEM Research
- Connecting to Relevant Resources

PEERS SPECIAL EVENTS

- Forum on Data Use and Methods—the Global Teaching InSights (video) Study
  January 2020 | 09:30 AM Eastern Time (US and Canada)

www.peersdatahub.net
2021 PEERS Methods Series with NSF Building Capacity in STEM Education Research Institutes

- Modern Meta-Analysis Research (Terri Pigott, Director; Georgia State University), January 2021.
- Cutting Edge Quantitative and Computational Methods for STEM Education Research (Guanglei Hong, Co-Director; University of Chicago and Ken Frank, Co-Director; Michigan State University), February 2021
- Quantitative Research Methods for STEM Education Scholars Program (Laura Stapleton, University of Maryland; Gregory Hancock, University of Maryland; March 2021)
- Institute for Meta-Synthesis: A Practicum through the Lens of STEM Equity and Inclusion Literature (Maria Ong, TERC; May 2021)
- Maryland Collaborative for Research in Urban STEM Education (Roni Ellington, Morgan State University; September 2021)
- The Pro-Qual Institute for Research Methods in STEM Education – A Novel Problem-Led and Research Quality-Focused Approach (Joachim Walther, University of Georgia; October 2021)
- Professional-development for Emerging Education Researchers (Eleanor Sayre, Kansas State University; November 2021)
2021 PEERS Series in STEM Data and Data Use

- STEM School Level Achievement in Grades 3-8 – use of the Stanford Education Data Archive (Andrew D. Ho, Harvard University; Sean F. Reardon, Stanford University; Benjamin R. Shear, University of Colorado, Boulder; Erin M. Fahle, St. John’s University) February, 2021

- Using Longitudinal and Large-scale Data to Address STEM (Chandra Muller, Director; University of Texas at Austin) May 2021
AERA Virtual Research Learning Center (VRLC)
- Research Methods
- Statistical Techniques (e.g., sensitivity analysis, meta-analysis, factor analysis)
- Large-Scale Data Sets (e.g., NAEP Process Data)
- Publishing courses
- PEERS recorded mini-courses and webinars (2-4 hours)
- www.aera.net

ICPSR Summer Program in Quantitative Methods of Social Research
- Research Methods
- Statistical Techniques
- Data Analysis
- Integrate research methods with theory and substantive issues
- 3-5 day workshops and 3-week short courses
- https://www.icpsr.umich.edu/web/pages/sumprog/courses.html

www.peersdatahub.net
Resources and Research

Learn about STEM research and improve your practices at the PEERS Hub. Whether you are looking for access to relevant STEM research, guidance through resources, or links to support your engaging in best practices, PEERS aim to anticipate your needs and get you to where you want to go.

- PEERS Podcast: Book talk with Dr. Ebony McGee-Black, Brown, Bruised: How Racialized STEM Education Stifles Innovation
- STEM Education Research Articles of Interest—A PEERS Open Access Repository from AERA journal Publications (coming soon)
- AERA Online Paper Repository
- REES Registry
- AERA Open Registered Reports
- Deposit your data to AERA-ICPSR NSF archive
- See the data behind STEM education research: The AERA OpenICPSR repository

Find all that you need for your STEM education research project all in one spot!
PEERS Data Hub will help you simplify data management so you can focus on your research analysis and writing

Transparency and reproducibility increase impact
- On your career
- On educational practice and policy

www.peersdatahub.net
Support from PEERS Data Hub

www.peersdatahub.net
Best Practices for Managing Data throughout the Data Life Cycle

A Resource Guide for New NSF PIs

https://www.icpsr.umich.edu/files/ICPSR/about/best-practices-peers.pdf
Planning transparent, reproducible research

Plan to share
- Share the data you use or create
- Share analysis code
- Share your research plan

Resources to help – not just data, but guidance on using data
- Data Management Plan
- Research pre-registration
- Best practice consent statements and other tips for working with human subjects and sensitive data

www.peersdatahub.net
Recommended Informed Consent Language for Data Sharing

Language to Avoid

Promises in the informed consent can appear to limit an investigator's ability to share data with the research community. In reality, investigators can inform study participants that they are scientists with an obligation to protect confidentiality and still share the study data with the broad scientific community. Many effective means exist to create public-use data files or share restricted-use data files under controlled conditions. That is, data can be modified to reduce the risk of disclosure or shared with additional safeguards while preserving their value for science.

Model Language

Here are two model statements investigators may use in informed consents to describe protection of confidentiality that also allows data sharing.

Sample 1. Study staff will protect your personal information closely so no one will be able to connect your responses and any other information that identifies you. Federal or state laws may require us to show information to university or government officials (or sponsors), who are responsible for monitoring the safety of this study. Directly identifying information (e.g., names, addresses) will be safeguarded and maintained under controlled conditions. You will not be identified in any publication from this study.

Sample 2. The information in this study will be used only for research purposes and in ways that will not reveal who you are. Federal or state laws may require us to show information to university or government officials (or sponsors) who are responsible for monitoring the safety of this study. You will not be identified in any publication from this study.

Known Concerns and Recommended Alternatives

https://www.icpsr.umich.edu/icpsrweb/content/datamanagement/confidentiality/conf-language.html
A REES entry includes:

SECTION 1: General study Information
SECTION 2: Description of study
SECTION 3: Research Questions
SECTION 4: Study design
SECTION 5: Sample characteristics
SECTION 6: Outcomes
SECTION 7: Analysis Plans
SECTION 8: Additional materials

Pre-register your study, share what you anticipate, and expand the visibility of your work!

Registry of Efficacy and Effectiveness Studies (REES) is a portal to register and discover causal inference studies in education and related fields.

LEARN MORE >

www.peersdatahub.net

Spybrook, J., Cook, B., and Mellor C. Meeting the requirements of funders around open science: Open resources and process for researchers.
Web-based interface

- Quick to enter a study
- Easy to navigate
- Currently 199 entries
WHERE TO SHARE?

FAIR data
- Findable, Accessible, Interoperable, Reusable

Put your data where it will be
- Found by others
- Preserved in the face of technological change
- Safe for provenance and confidentiality
- Uniquely and persistently identified
- Cited
- With the other articles in the journal

www.peersdatahub.net
American Educational Research Association Data Repository

Depositing Data with openICPSR to fulfill the American Educational Research Association's Archiving and Replication Requirements
SHARE AND ARCHIVE YOUR DATA WITH ICPSR

Statistics

15,483 studies

5,646,229 variables

94,019 publications

Countires Using Our Data

1. United States
2. China
3. United Kingdom
4. India
5. Canada
6. South Korea
7. Germany
8. Australia
9. Philippines
10. Japan

www.peersdatahub.net
An NSF funded collaborative initiative

- Found by others
- Build on the expertise and experience in the AERA Grants Program to promote high quality analyses of underutilized data
- Enable sustained contributions with data through training and capacity building
- Support research capable of adding foundational knowledge of wide significance about teaching and learning in STEM fields

https://www.icpsr.umich.edu/web/pages/AERA/index.html
PEERS IS HERE FOR YOU
www.peersdatahub.net

CONNECT WITH YOUR PEERS
- Join a PEERS Pod or participate in the Interactive Researcher Gallery
- Ask a question
- PEER to PEER forum
- NCSES data users forum
- Keep in touch through the PEERS mailing list

QUESTIONS OR SUGGESTIONS?
You can always reach us at AERA-ICPSR-PEERS@aera.net