

Introduction

You are invited to participate in a research project led by [REDACTED]

[REDACTED] Economic research has become increasingly empirical, and according to standards of the American Statistical Association (ASA), authors of research involving statistical analysis have an ethical responsibility to “promote sharing of data and methods” and “make documentation suitable for replicate analyses” available (ASA 2016). In response to widespread calls for improved transparency, the American Economic Association recently appointed its first Data Editor, with a mission to “design and oversee the AEA journals’ strategy for archiving and curating research data and promoting reproducible research”. This study is designed to determine the prevalence of teaching reproducible research methods in the undergraduate economics curriculum at liberal arts colleges (LACs) in the United States.

Your participation in this study is voluntary, though our project’s success does depend on broad participation from liberal arts faculty. **All participants completing the survey prior to July 14, 2021 will be entered in a lottery to receive a \$20 Visa gift card.** We will protect your confidentiality. Any data that uniquely identifies you or your institution will only be used if you are selected as a lottery winner or choose to be updated on this project in the future. All data will be stored securely and will be de identified before we conduct any analysis. De identified data from this study may be shared with the research community at large to allow replication of our results. We expect no risks to you for participating in the study.

If you have any questions or concerns about this study, please contact [REDACTED] and/or the [REDACTED] Institutional Review Board Chair, [REDACTED].

What are reproducible methods?

Reproducibility refers to the ability of a researcher to duplicate the results of a prior study using the same materials and procedures as were used by the original investigator. *Replicability* refers to the ability of a researcher to duplicate the results of a prior study if the same procedures are followed but new data are collected.

So, teaching *reproducible methods* means teaching students the skills and approaches needed to develop a research workflow that is conducive to reproducibility and facilitates replication. This includes, but is not limited to:

- Organizational skills (file management, folder structure, working directories, file paths, etc.)
- Coding for reproducibility (easy to read and fully commented command files)
- Using dynamic documents (Jupyter Notebook, R Markdown, etc.)
- Producing replication documentation (ReadMe files, codebooks, etc.)
- Accessibility and sharing (GitHub, Open Science Framework, Dataverse, etc.)

Do you agree to participate?

- ☐ Yes, I have read the above information and agree to participate in this study.
- ☐ No, I do not want to participate.

Screening

Recall, teaching *reproducible methods* means teaching students the skills and approaches needed to develop a research workflow that is conducive to reproducibility and facilitates replication.

In the past three years, have you incorporated the teaching of reproducible research methods in any of your courses?

- ☐ Yes
- ☐ No

Have you considered doing so or do you have any plans to do so in the future?

Course Information

In which course do you teach reproducible methods? [If you teach these methods in more than one course, you'll have an option to list other courses next.]

Course Number and Name

What type of course is this?

- ☐ an introductory statistics course students take before econometrics
- ☐ a basic econometrics course
- ☐ an advanced statistics or econometrics course, taken after basic econometrics
- ☐ Other. Please specify.

Which reproducible methods? (Choose all that apply)

- ☐ Organizational skills (file management, folder structure, working directories, file paths, etc.)
- ☐ Coding for reproducibility (easy-to-read and fully-commented command files)
- ☐ Using dynamic documents (Jupyter Notebook, R Markdown, etc.)
- ☐ Producing replication documentation (ReadMe files, codebooks, etc.)
- ☐ Accessibility and sharing (GitHub, Open Science Framework, Dataverse, etc.)
- ☐ Other. Please explain

Please provide any additional information needed to clarify your responses above.

How are these methods incorporated into your course? (Choose all that apply)

- ☐ Workshops and/or labs
- ☐ Group work and/or projects
- ☐ Individual projects or research papers

☐ Homework exercises

☐ Exams

☐ Other. Please explain.

Please provide any additional information needed to clarify your responses above.

Why do you teach these methods in this course? In other words, what are the student learning objectives?

What skills do you want students to learn through these methods? Why might they be useful in the future, regardless of vocational choice?

In the past three years, have you incorporated the teaching of reproducible research methods in any *other* course?

☐ Yes

☐ No

Demographics

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Please provide the following information:

Name

Email address

Institution

Department

Title/Position

How many years of undergraduate teaching experience do you have?

- ☐ 0-4 years
- ☐ 5-9 years
- ☐ 10-14 years
- ☐ 15-19 years
- ☐ 20+ years

Future

Thank you for participating in our survey! We appreciate your time!

Any other thoughts or comments you are willing to share about teaching reproducible methods in undergraduate economics?

Would you like to receive a summary or report on the results of this survey?

- ☐ Yes
- ☐ No

Would you like to be invited (via email) to participate in follow up discussions on reproducibility in the economics curriculum?

- ☐ Yes
 - ☐ No
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