



FEDERAL
RESERVE
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Building Economic Education at Scale

July 31, 2025

Presenter

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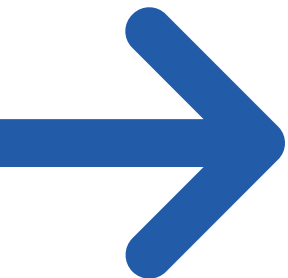


This information is my opinion and does not represent the official views of the Federal Open Market Committee, the Federal Reserve System or the Federal Reserve Bank of St. Louis.

How does Research Information Services evaluate the success of initiatives and build products that scale?

**We use the tools of economic analysis
to improve economic education.**

Why conduct research on economic education?



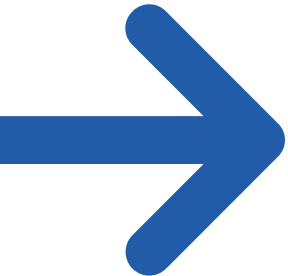
- Evaluation of current practices.
- Testing of alternatives.
- Evidence-based decision making.



Sources of Data

- Administrative databases.
- Qualtrics surveys.
- Natural experiments.
- Controlled experiments.

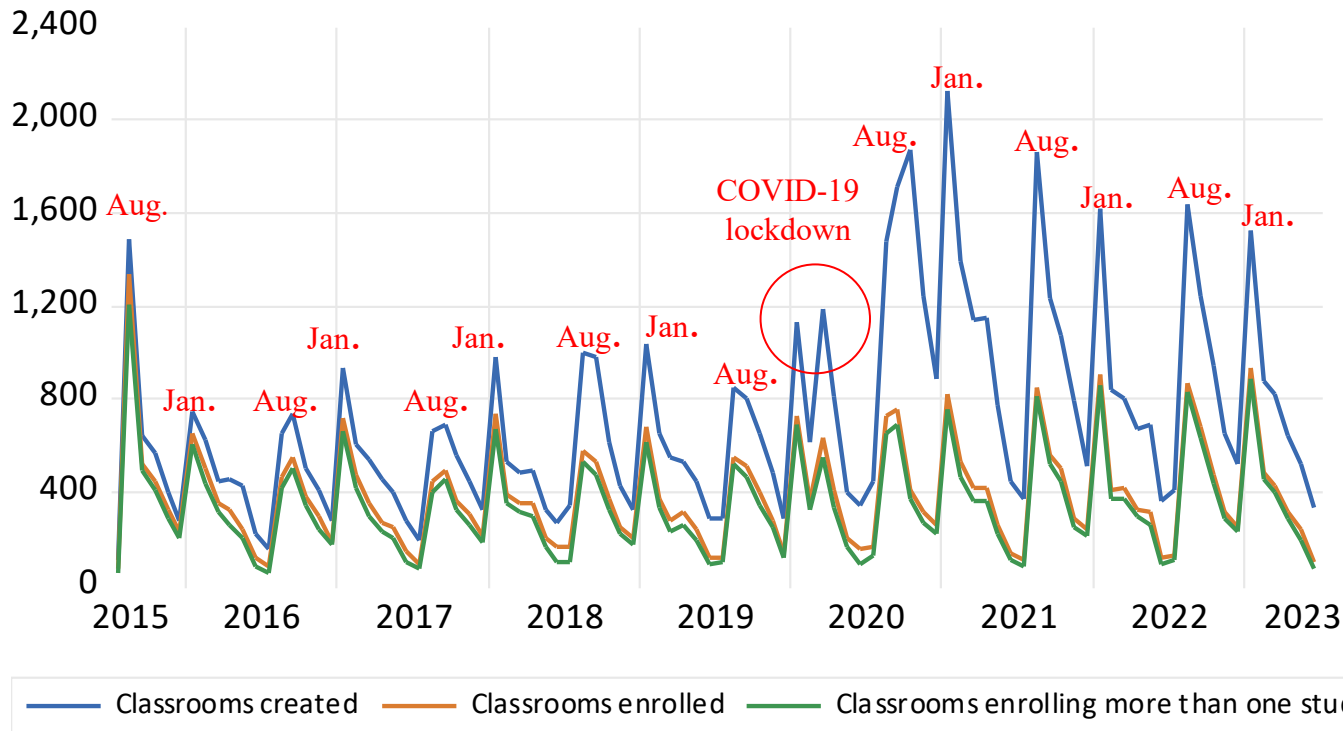
Methods of Analysis

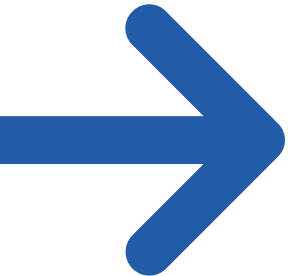
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- Comparing means and variances for statistically significant differences.
 - Multivariate regressions, controlling for:
 - Learner characteristics.
 - Types of instructional interventions.

Lessons Learned Through Research

When do instructors tap into our resources?

Classrooms created and enrolled by month





Findings:

- Two seasonal activity peaks: January and August.

Actions:

- Schedule training and outreach seminars in January and August.

Eastern Economic Journal

<https://doi.org/10.1057/s41302-022-00232-z>

ORIGINAL ARTICLE

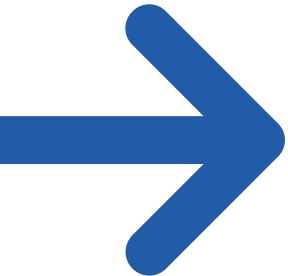


The Effectiveness of Logical Distractors in an Online Module

Diego Mendez-Carbajo¹

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<https://doi.org/10.1057/s41302-022-00232-z>



Findings:

- Logical distractors do not reliably change the level of difficulty of a multiple-choice question.

Actions:

- Avoid using logical distractors and write definitional distractors instead.



Contents lists available at ScienceDirect

International Review of Economics Education

journal homepage: www.elsevier.com/locate/iree

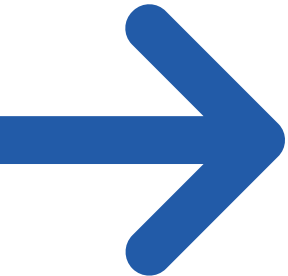


Choice of data visualization tool: FRED or spreadsheets?

Diego Mendez-Carbajo^{a,*}, Alejandro Dellachiesa^b



<https://doi.org/10.1016/j.iree.2023.100275>



Findings:

- Students assigned to create a data graph using Google Sheets abandoned the task more frequently than students assigned to use FRED.

Actions:

- Use FRED assignments to boost task completion and learning economics.



ELSEVIER

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International Review of Economics Education

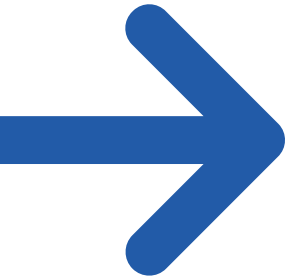
journal homepage: www.elsevier.com/locate/iree



Teaching with FRED and active-learning methods in introductory economics courses

Laura J. Ahlstrom^{a,*}, Diego Mendez-Carbajo^b

<https://doi.org/10.1016/j.iree.2025.100314>



Findings:

- The educational use of FRED is not exclusively in the hands of more experienced instructors and those who are economics subject matter experts.

Actions:

- Keep FRED® and Carry On!

Building Products that Scale





Screen capture of FRED series in 2025
<https://fred.stlouisfed.org/series/ILNA>

Who Uses FRED?

18 million

website users generated
34.4 million sessions in 2024

33% of users engage with the
FRED graph, demonstrating a
desire to understand the data.



Have We Met Before?

SEA

**SOUTHERN ECONOMIC
ASSOCIATION**

**EASTERN
ECONOMIC
ASSOCIATION**

 **WEAI**

MEA
Midwest Economics Association



**AMERICAN
ECONOMIC
ASSOCIATION**

Teaching Undergraduate and Graduate Economics, and
Research in Economic Education

Federal Reserve Economic Data: A History

Diego Mendez-Carbajo¹ 
and Genevieve M. Podleski¹

The American Economist

2021, Vol. 66(1) 61–73

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DOI: 10.1177/0569434520973989

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By studying FRED workshops, we learned that participating in a professional development program improved the perceived self-efficacy of both novices and experts at teaching with data.

Outreach and Education at Scale

FRED micro-credentials

- Modular skills.
- Asynchronous delivery.
- Scalable outreach.



Four separate programs have issued 20,000 badges since 2022.

What are micro-credentials?

What are Micro-Credentials?

A micro-credential is a short, competency-based recognition that allows an individual to demonstrate mastery in a particular area.

Frequently visible in social media as digital badges, micro-credentials offer employers the opportunity to evaluate a potential employee in terms not only of the resume or the cover letter but also based on a more granular body of skill sets and experiences.

The use of digital badges to award micro-credentials has been around for a decade and is now considered mainstream.



Keeping up with...
ECONOMIC DATA LITERACY

Structure

- Scaffolded instruction.
- Fully asynchronous.
- Skills organized in modules. Examples:
 - **Using Data Ethically**
 - **Visualizing Data**
 - **Storytelling with Data**
 - **Blogging About Data**

Module Sections

- Topic introduction.
- Hands-on practice with FRED®.
- Data exploration (x2).
- Transfer exercise.

Progran Metrics

Overall Metrics

December
2021
-
July
2025

Analytics

Credentials

Templates

Recommendations

All Time

Collections 4

Templates

More

All Time

Export



Accepted	16,517
Pending	4,076
Rejected	0

80%

Acceptance Rate
Credly average is 67%

17%

Share Rate
Credly average is 47%

1.49

Views per Share
Credly average is 3.28

0.16

Clicks per View
Credly average is 0.90

Program Evaluation

Figure 1. Program funnel

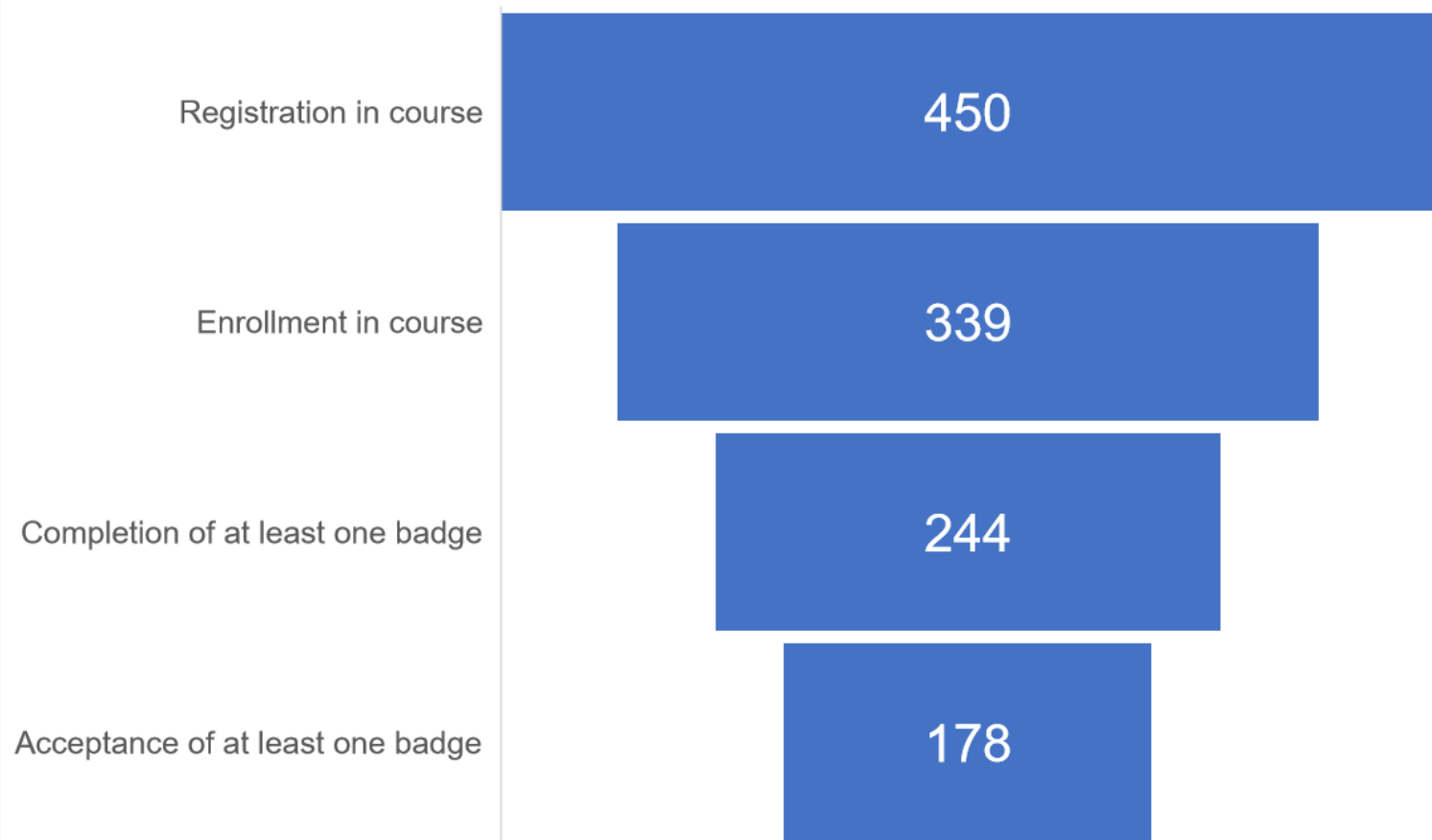


Figure 2. Users from "edu" domains

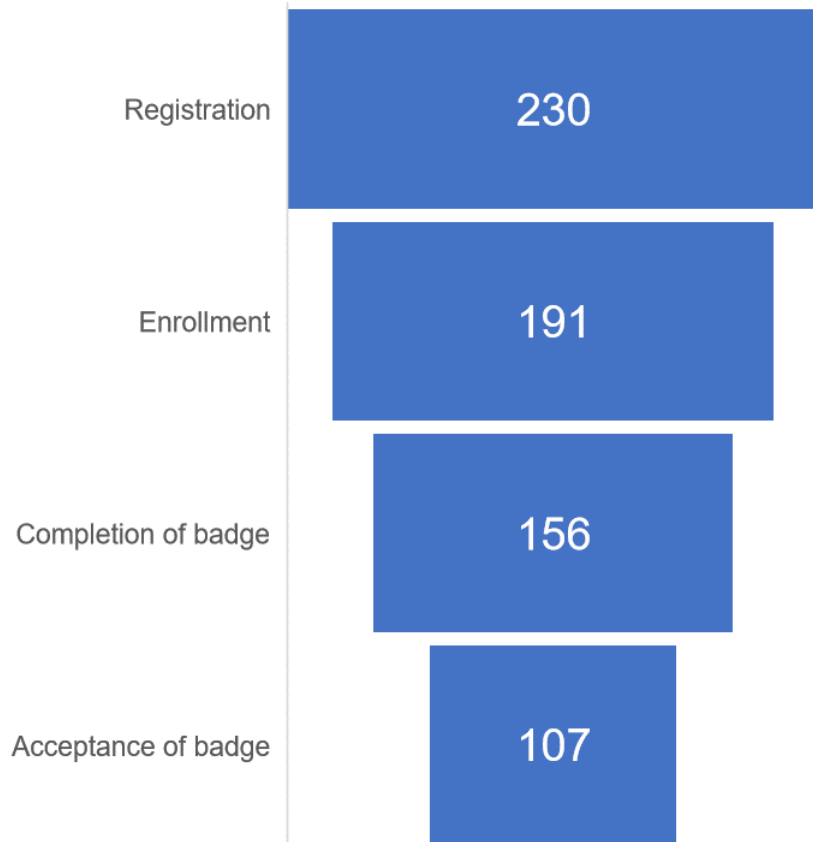
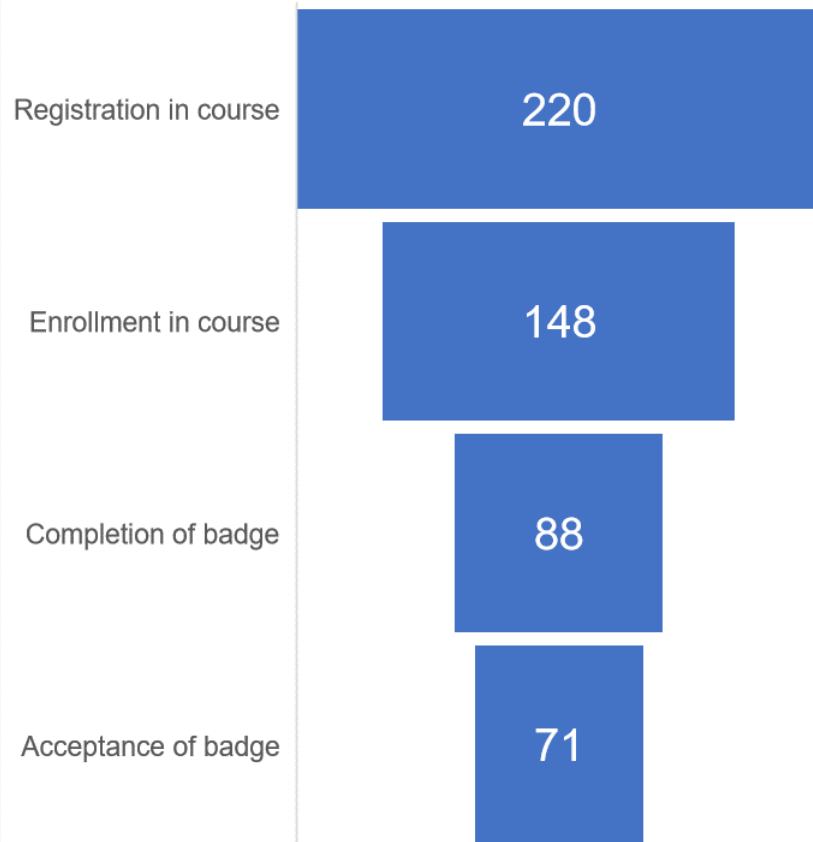


Figure 3. Users from other domains



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Community development tools to support an economy in which all can benefit

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