



# Requiring Financial Education in Montana Schools

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# About me

- Montana State University Associate Professor of Economics
- PhD in Economics from University of Wisconsin-Madison in 2012 (Montanan since then!)
- Research nerd interested in personal finance education
- Worked in partnership with the U.S. Consumer Financial Protection Bureau's Office of Financial Education from 2017-2020 to evaluate financial education programs and translate research.
- Worked with the Federal Reserve Board on financial education.
- Worked with many state legislatures to translate research when they consider implementing financial education in schools.
- NOT a lobbyist.
- No payments from anyone tied to findings or results.



# Roadmap



The why: Why do we need financial education?



The course requirement: Which states have it?



The research: How does requiring financial education affect behaviors?



The landscape: Financial education in Montana high schools



The downside: What are the costs?



The how: Resources and Implementation



# Why is financial literacy important?

Young adults gaining financial independence are about to make really important decisions:

- Should I go to college? Where? How should I pay for it?
- Other borrowing decisions: auto loans, credit cards, payday loans, etc.
- How do I save for emergencies?
- Which job should I take? How do I pay taxes?



# Young adults make challenging financial decisions with little information

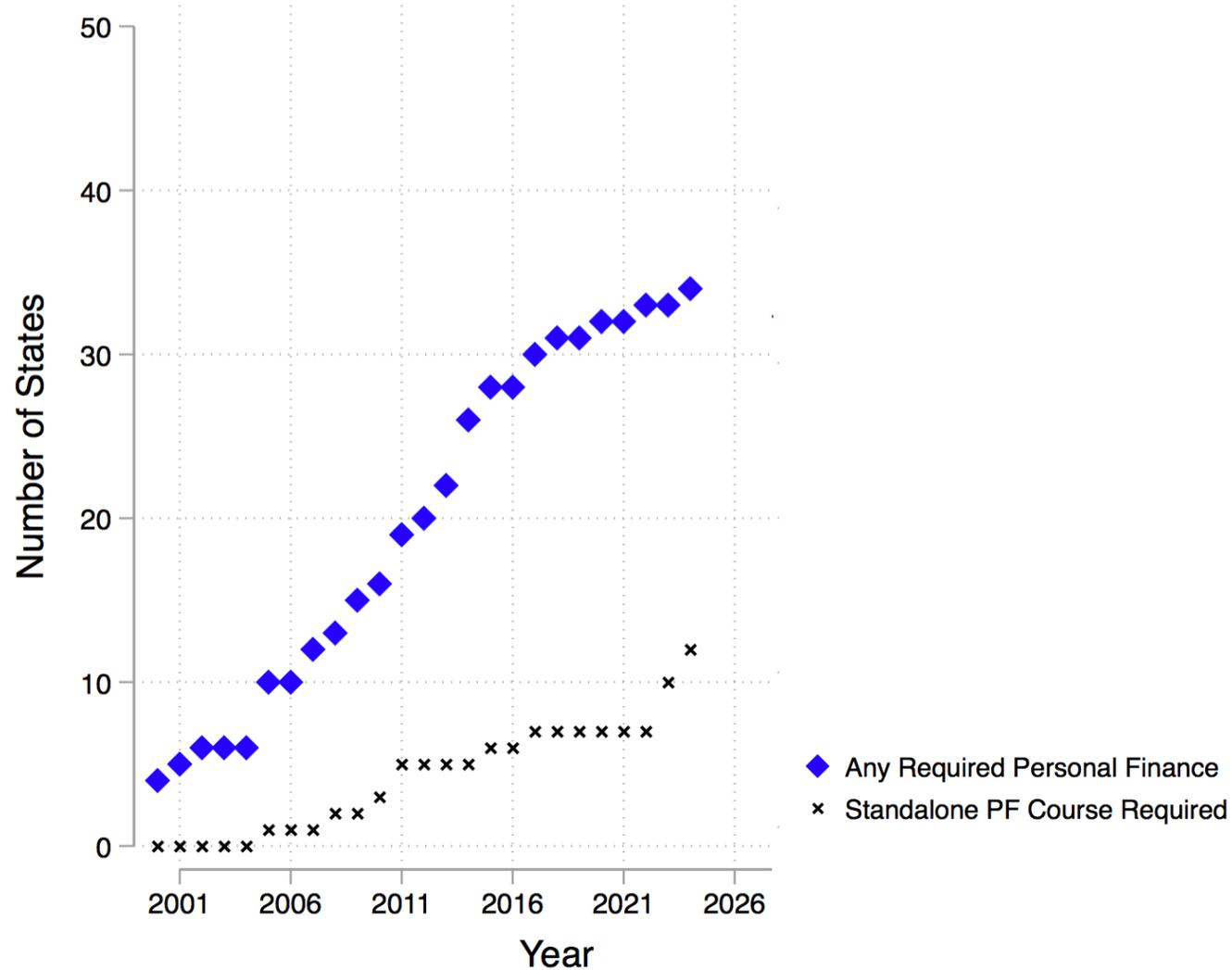
- Only 27% of 23-28-year-olds can correctly answer 3 basic questions on interest, inflation, and diversification.
- 54% of student loan borrowers did NOT calculate their future monthly payments before choosing a loan.
- 38% of 18-34-year-olds reporting having used Alternative Financial Services in the last five years.
- Are young adults prepared to be financially independent?



# Why financial education in schools?

1. It's good for students: Requiring personal finance education in HS improves debt and credit outcomes in the long-run for students.
2. People want it: 88% of respondents in a 2022 survey say HS students should be required to take a semester- or year-long course in PF.

# State Policies Over Time



Statistic: In states where PF is required within another course or content area, only 44% of schools require students to complete PF content.

8

FULLY-IMPLEMENTED  
GUARANTEED STATES



ALABAMA



MISSISSIPPI



MISSOURI



IOWA



NORTH  
CAROLINA



TENNESSEE



UTAH



VIRGINIA

5

BEGINNING  
IMPLEMENTATION STATES



FLORIDA



NEBRASKA



RHODE  
ISLAND



OHIO



GEORGIA



After states  
require  
personal  
finance in high  
schools.....

\*\*For more on the sources and studies, see a recent blog post I wrote on this: <https://www.ngpf.org/blog/advocacy/dr-carly-urban-guest-post-what-happens-when-states-guarantee-personal-finance-for-all-high-schoolers/>



## Insights: Financial Capability

# Delinquency rates fall and credit scores improve

January 2015

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## State Financial Education Mandates: It's All in the Implementation

### Executive Summary

Policymakers have promoted financial education as a means of combating low-levels of financial literacy and negative financial behaviors among the U.S. population. However, previous research on the effectiveness of financial education has found, at best, mixed evidence that it improves financial well-being, often due to data and methodological limitations. We address some of the limitations of previous research. Our analysis uses the Federal Reserve Bank of New York/ Equifax Consumer Credit Panel in combination with detailed information on the mandates passed in three states after the year 2000. We then employ a new statistical approach that compares the changes in credit scores and default in states after implementation of the mandate to the changes in comparable states

Cohort	Credit Scores	90+ Day Delinquency
1st	no change	falls by 1.4 percentage points
2nd	up by 16 points	falls by 3.4 percentage points
3rd	<b>up by 32 points</b>	<b>falls by 5.8 percentage points</b>



Student  
borrowing shifts  
from high- to  
low-cost  
methods

# BETTER BORROWING

How State-Mandated Financial Education  
Drives College Financing Behavior

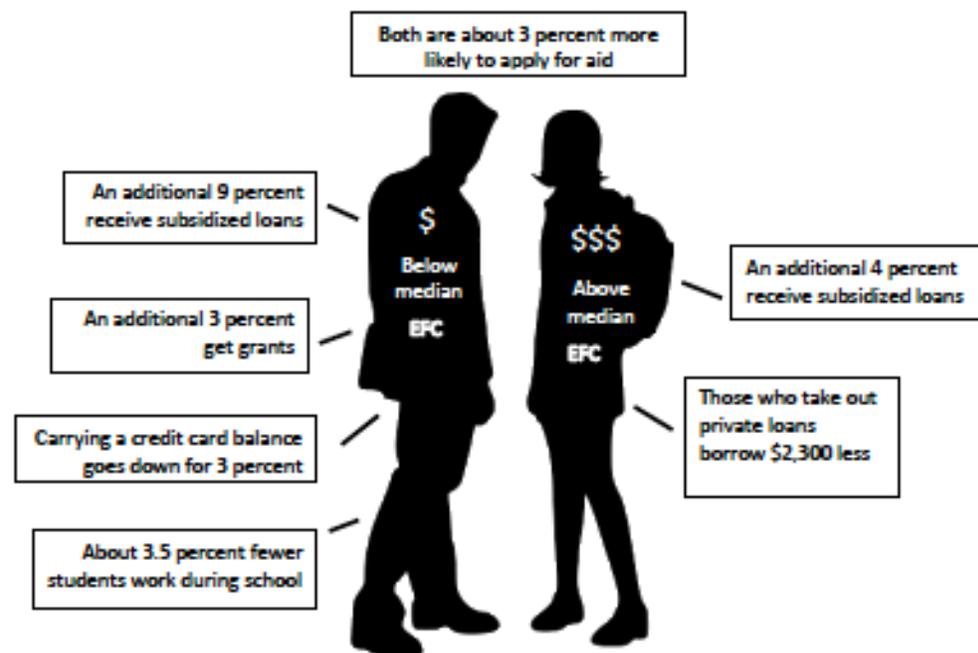


**On average, exposure to financial education:**

- » Increases applications for aid by 3.5 percent.
- » Increases the likelihood of taking out a Stafford loan by 9.5 percent.
- » Increases the likelihood of having a grant by 1.4 percent.
- » Decreases the likelihood of carrying a credit card balance by 21 percent.
- » Reduces private loan balances by roughly \$1,300 for borrowers.



# Effects are biggest for low-income students





Student loan  
repayment increases,  
particularly for first-  
gen students who  
attend public schools

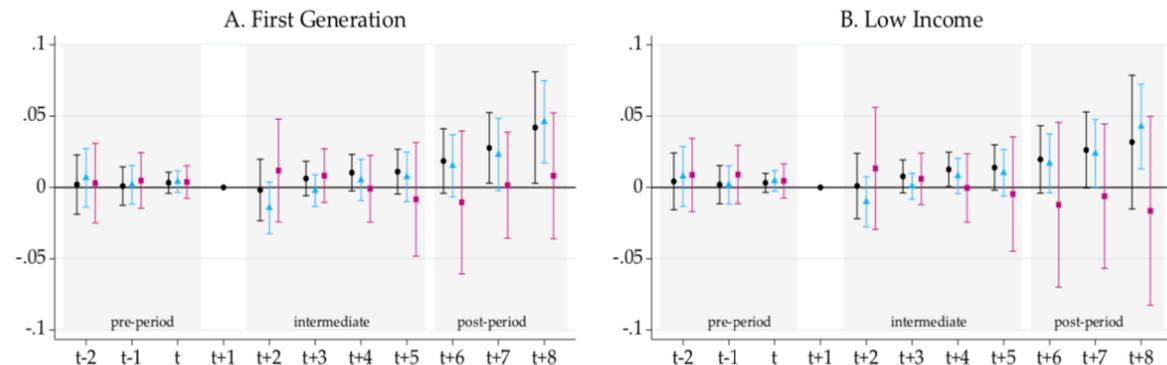
## Personal Finance Education Mandates and Student Loan Repayment

Daniel Mangrum\*

### Abstract

This paper explores whether requiring high school students to complete personal finance education affects federal student loan repayment behavior after college. I match student loan borrowing and repayment data from the College Scorecard with counts of high school graduates enrolling in college from the Integrated Postsecondary Education Data System. I estimate the causal effect of personal finance education mandates by relating the change in the share of university students subject to a state mandate to changes in university cohort student loan outcomes. I find only students with higher-income parents respond by adjusting borrowing, reducing median balances by 7%. This response is likely due to learning of their higher relative cost of federal borrowing. By contrast, first-generation and low-income borrowers bound by mandates did not significantly adjust borrowing, but were nonetheless more likely to pay down balances. Repayment improvements are in part due to better understanding of the terms governing federal student loans. State mandates that incorporate career research alongside personal finance education are associated with better student loan repayment than those focused only on personal finance education.

*Keywords:* financial literacy, student loans, postsecondary finance, high school curriculum  
*JEL:* D14, G51, G53, I22, I28, J24





# Payday lending declines

April 2019

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**What's Inside:**

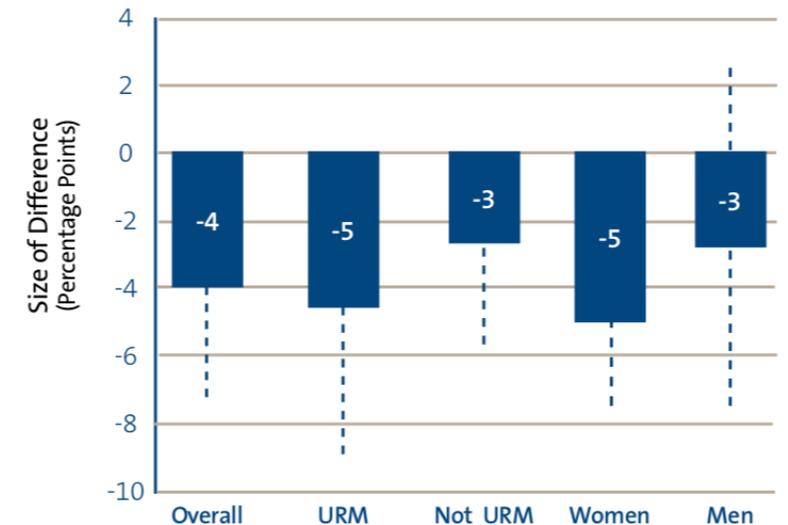
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### Does State-Mandated Financial Education Affect High-Cost Borrowing?

**Summary**

Using pooled data from the 2012 and 2015 waves of the National Financial Capability Study (NFCS), this research finds that young adults who were required to take personal finance courses in high school were significantly less likely to borrow payday loans than their peers who were not. These effects do not significantly differ by race/ethnicity or gender, suggesting that financial education may be useful regardless of demographics.

**Figure 4. Comparing Payday Borrowing by Respondents Subjected to Financial Education Mandates to Those Who were Not, Overall and by Race/Ethnicity and Gender**





Subjective financial well-being improves overall, but makes some subgroups more “realistic” about future financial situations.

**How Does Financial Education in High School Affect the Subjective Financial Well-being of Adults?**

Jeremy Burke, Senior Economist, Center for Economic and Social Research, University of Southern California  
J. Michael Collins, Professor and Faculty Director, Center for Financial Security, University of Wisconsin-Madison  
Carly Urban,<sup>1</sup> Associate Professor of Economics, Montana State University, and Research Fellow, IZA Institute of Labor Economics

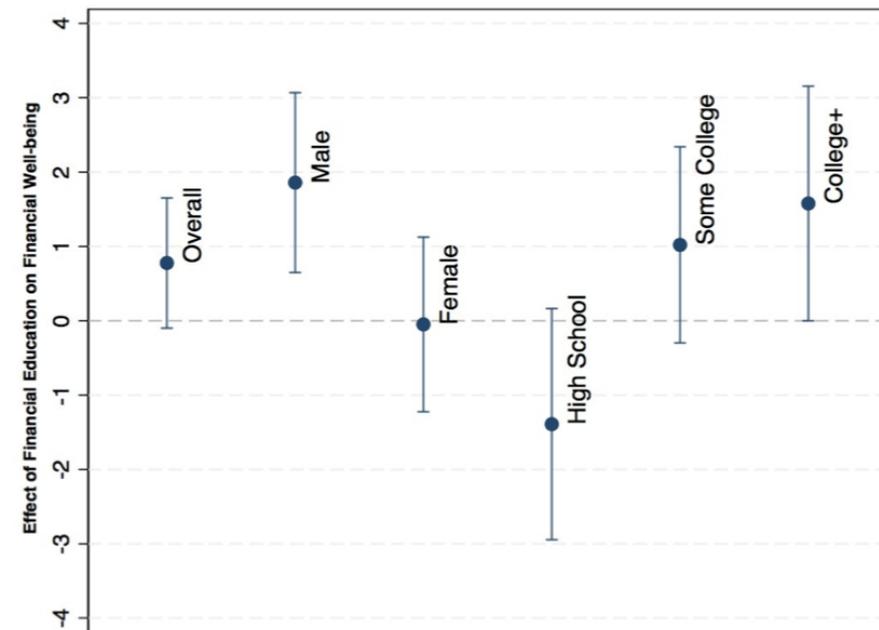


Figure 2: The Effect of Financial Education on Financial Well-being Overall, by Gender, and by Education

Requiring financial education does not  
change...

# Does financial education affect retirement savings?

Policymakers, practitioners, and educators currently debate whether high school personal finance coursework should include content on retirement planning. Retirement planning sooner than later pays huge dividends in old age, but teenagers often face more immediate issues concerning budgeting, credit, postsecondary financing, and insurance.

## Summary

This study evaluates whether state-required personal finance coursework in high school as currently known affects the likelihood of holding retirement accounts and the amounts saved in retirement accounts among prime-aged adults ages 25–40. The findings intend to inform which policy levers in the consumer education space may ideally increase individuals' retirement planning and saving, especially as they are gradually required to steward their own retirement portfolios.

## Key insights

Among an overall population, we find no evidence that the education improves the likelihood of having a retirement account, having a non-retirement savings account, or owning a home.

### **Melody Harvey**

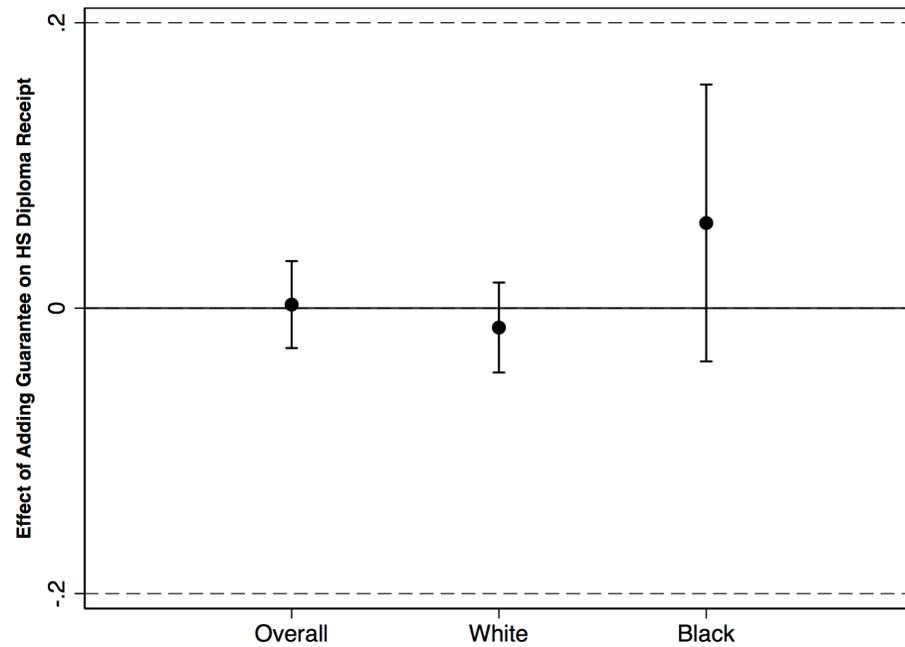
University of  
Wisconsin–Madison

### **Carly Urban**

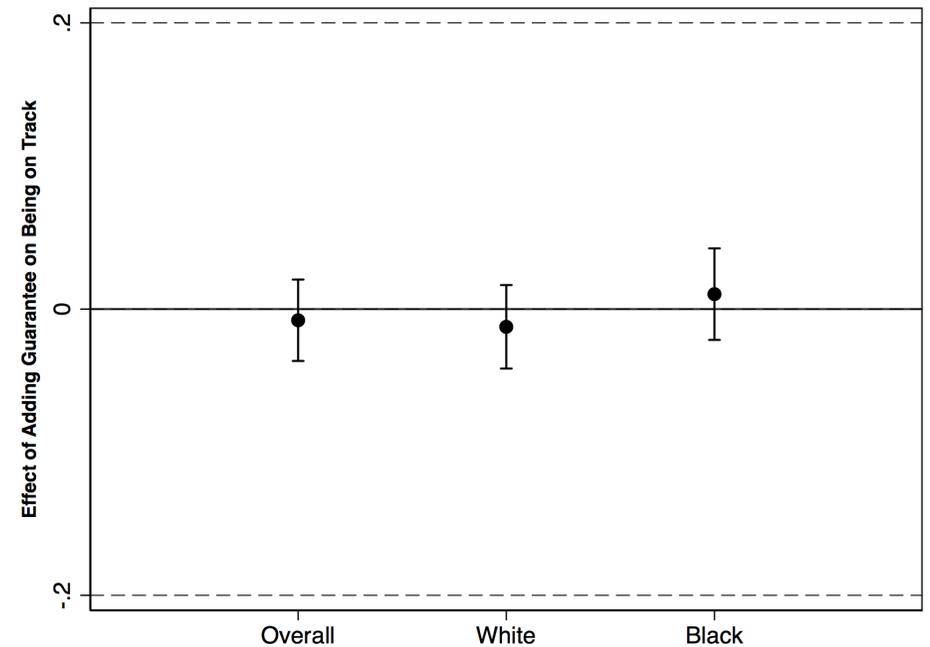
Montana State  
University and IZA

# HS graduation rates

## HS graduation by age 19



## Remaining “on track” for HS graduation by age 18



# Income, college attendance, college completion

Figure A.3: Effect of Financial Education Requirement on Annual Household Income

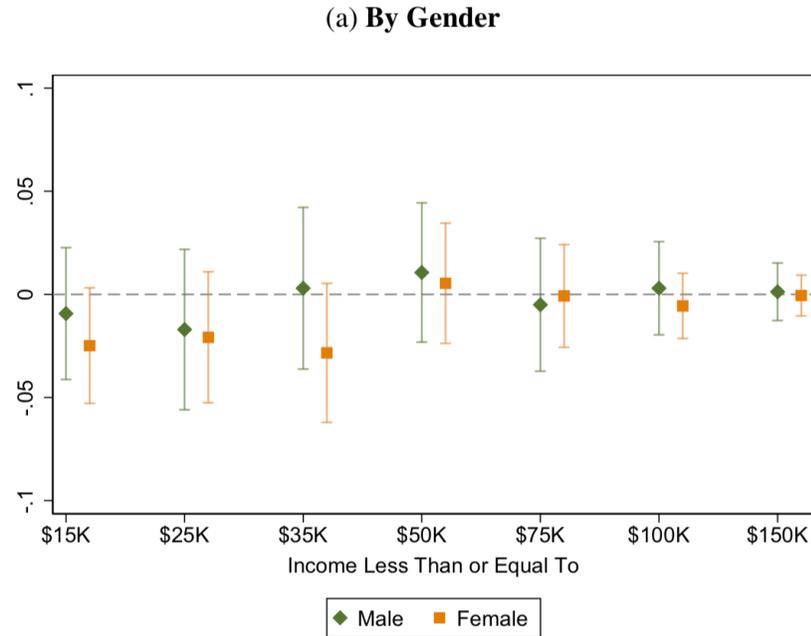
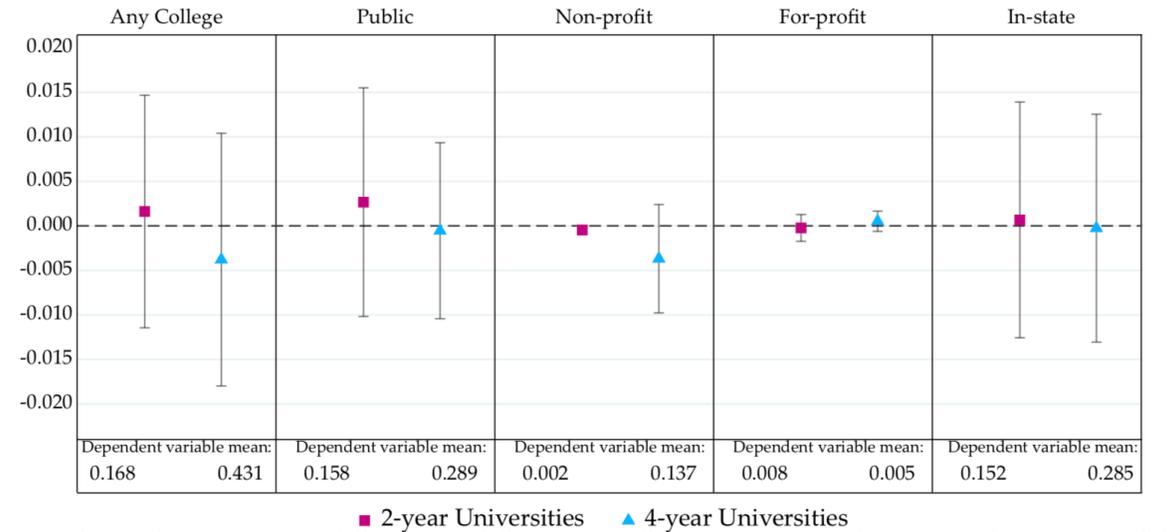


Figure 4: Difference-in-Differences Estimates for Changes to College Enrollment





# Why is a requirement necessary??

Table 9 reports the results, where across Columns 1–3, offering financial education has no statistically significant effect on having subsidized Stafford loans, having unsubsidized Stafford loans, or having a grant.<sup>48</sup> This could be due to low take-up rates, poor implementation of courses, or minimal effects on the type of students who self-select these courses. While the estimates are close to zero in magnitude, the confidence intervals for the estimates in Columns 1–3 are wide. The presence of elective courses when mandates are absent do not appear to have similar effects as state requirements for all students.

Table 9. Offering Personal Finance and Financial Aid in Montana

	(1) Have sub Stafford	(2) Have unsub Stafford	(3) Have grant
PF Offered	-0.008 (0.010)	-0.007 (0.012)	-0.001 (0.012)
<i>N</i>	21,385	21,385	21,385

SOURCE: Montana University System administrative data (2002–14).



# Meta-analysis

- Financial education improves financial knowledge and behaviors.
- Magnitudes similar to effects in math and reading.
- The interventions are cost-effective.

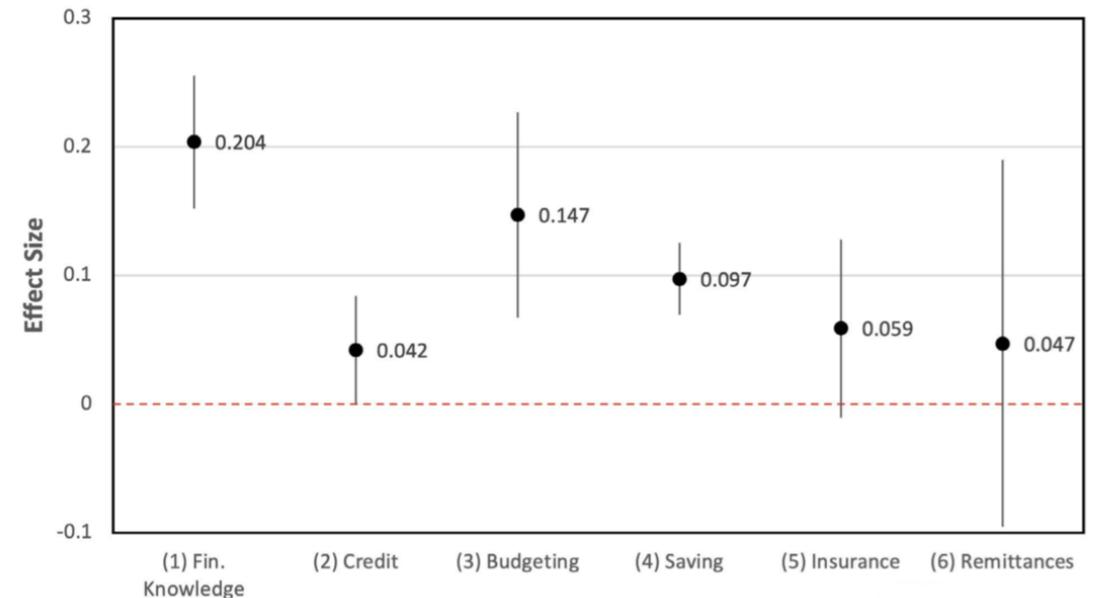
March 2022

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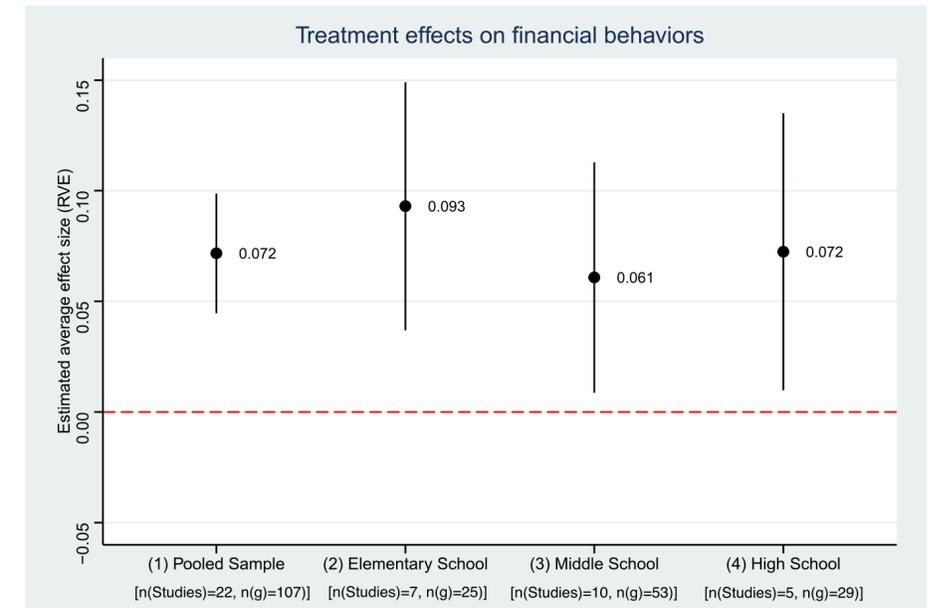
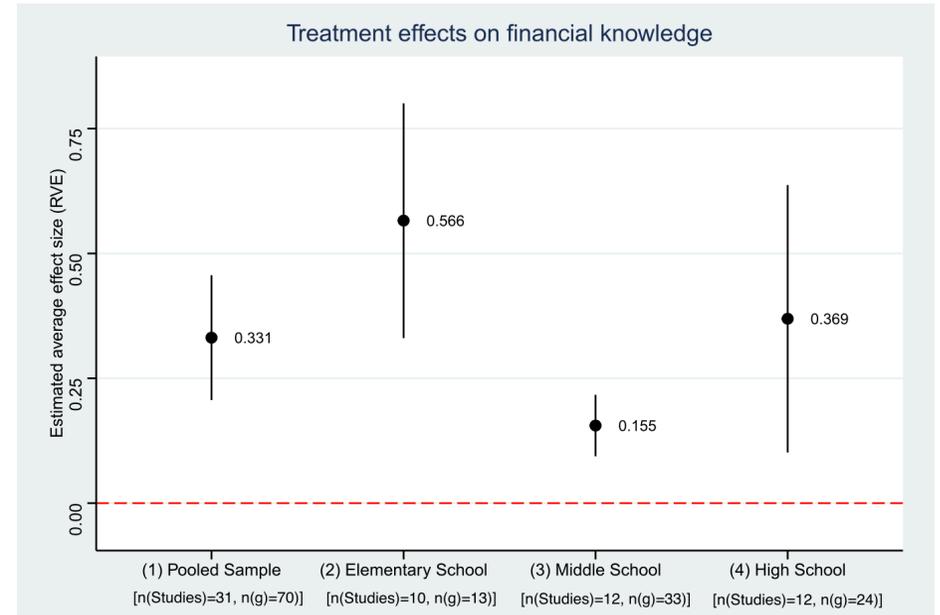
## Financial Education Matters: Testing the Effectiveness of Financial Education Across 76 Randomized Experiments

Figure 3: Effects of financial education across outcomes



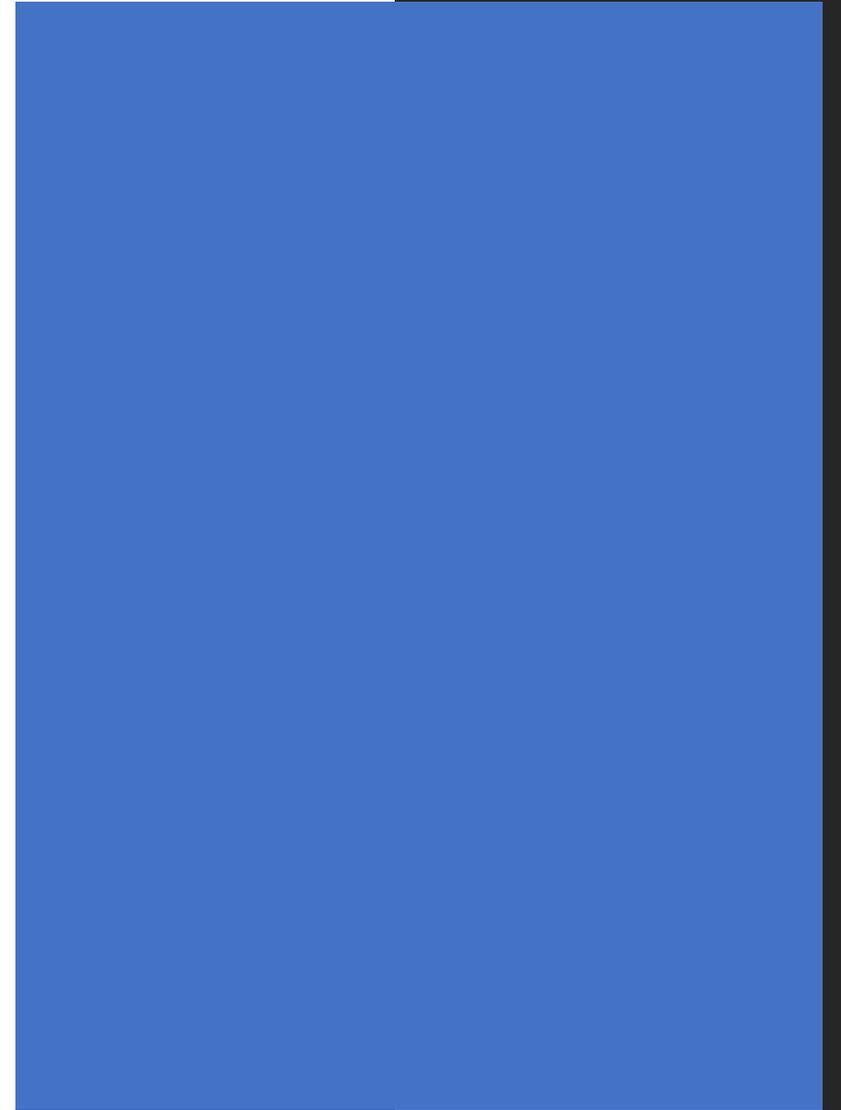
Another meta-analysis looks only at interventions in schools

Kaiser and Menkhoff (2020) Economics of Education Review



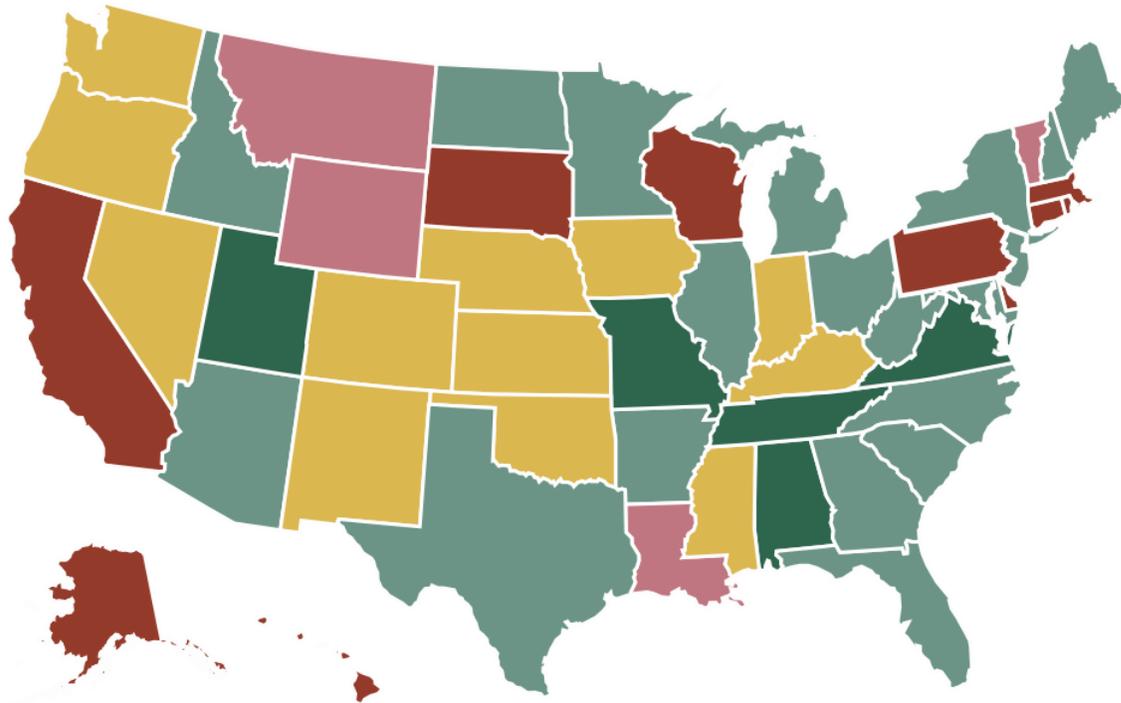


Where does  
Montana stack  
up?



# Is your state making the grade?

## GRADE COLOR KEY



## Final Grade



## Graduation Requirements

Is a high school course with personal finance concepts required to be taken as a graduation requirement? No, personal finance is not included in the graduation requirements, either as a stand-alone course or embedded in another course, and schools are not required to offer financial literacy courses. See: [Montana High School Graduation Requirements](#).

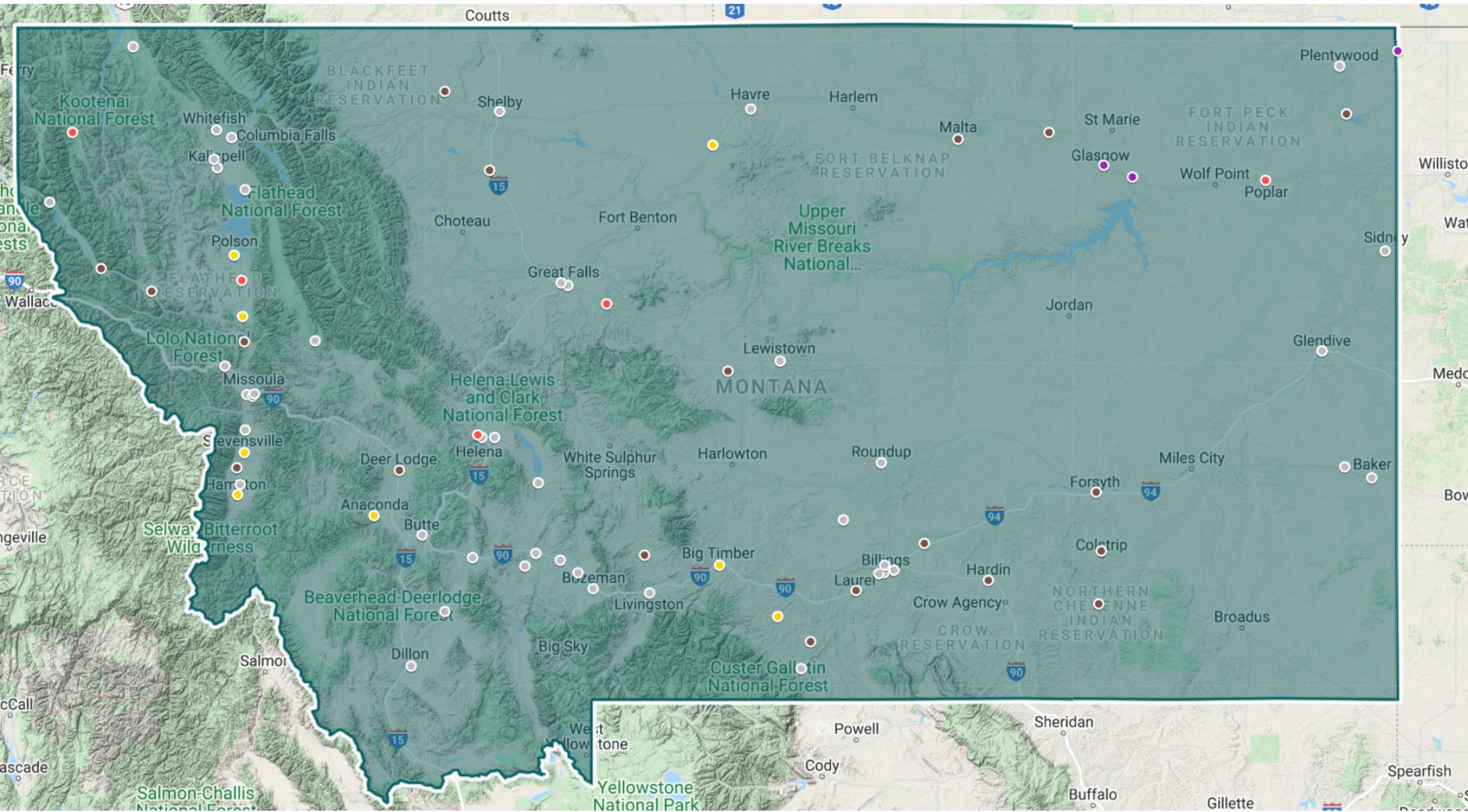
## Education Standards

Montana requires students to take two years of social studies but does not identify specific social studies courses to be taken. The social studies content standards indicate what all students should know when they graduate. They consist of six content standards that are made up of 36 benchmarks. The economics content standards consist of six benchmarks. One of these benchmarks (or 3% of all social studies benchmarks) includes personal finance concepts. See: [Montana Social Studies Content Standards](#).

## Caveat

It is not clear how Montana measures student achievement in financial literacy or how the state monitors local school district implementation of the financial literacy education requirement.

# Access in Montana



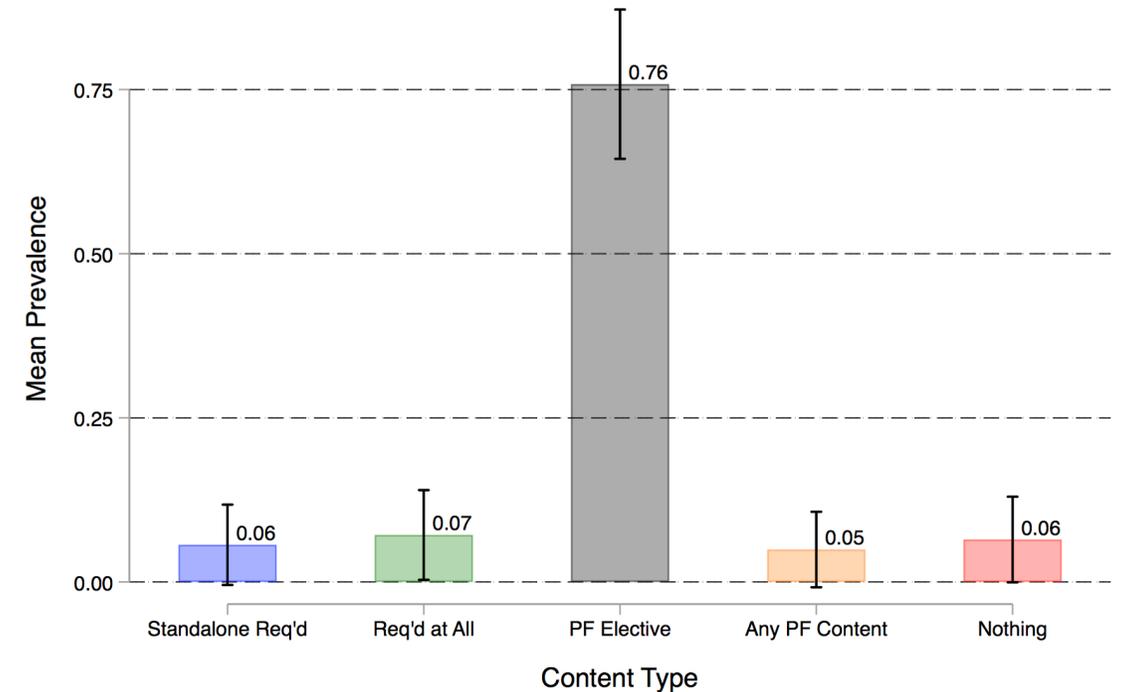
- Silver Standard
- Bronze Standard
- Gold Standard
- No Offerings
- FUTURE Gold Standard



# Montana Data:

According to 2021-2022 data from online course catalogs:

- 6% of students attend schools that guarantee a personal finance course
- 76% of students attend schools that offer a personal finance elective





# US stats on local HS data

2,433,010 students are in high schools with PF required as a standalone course.

- One in four students (24%).



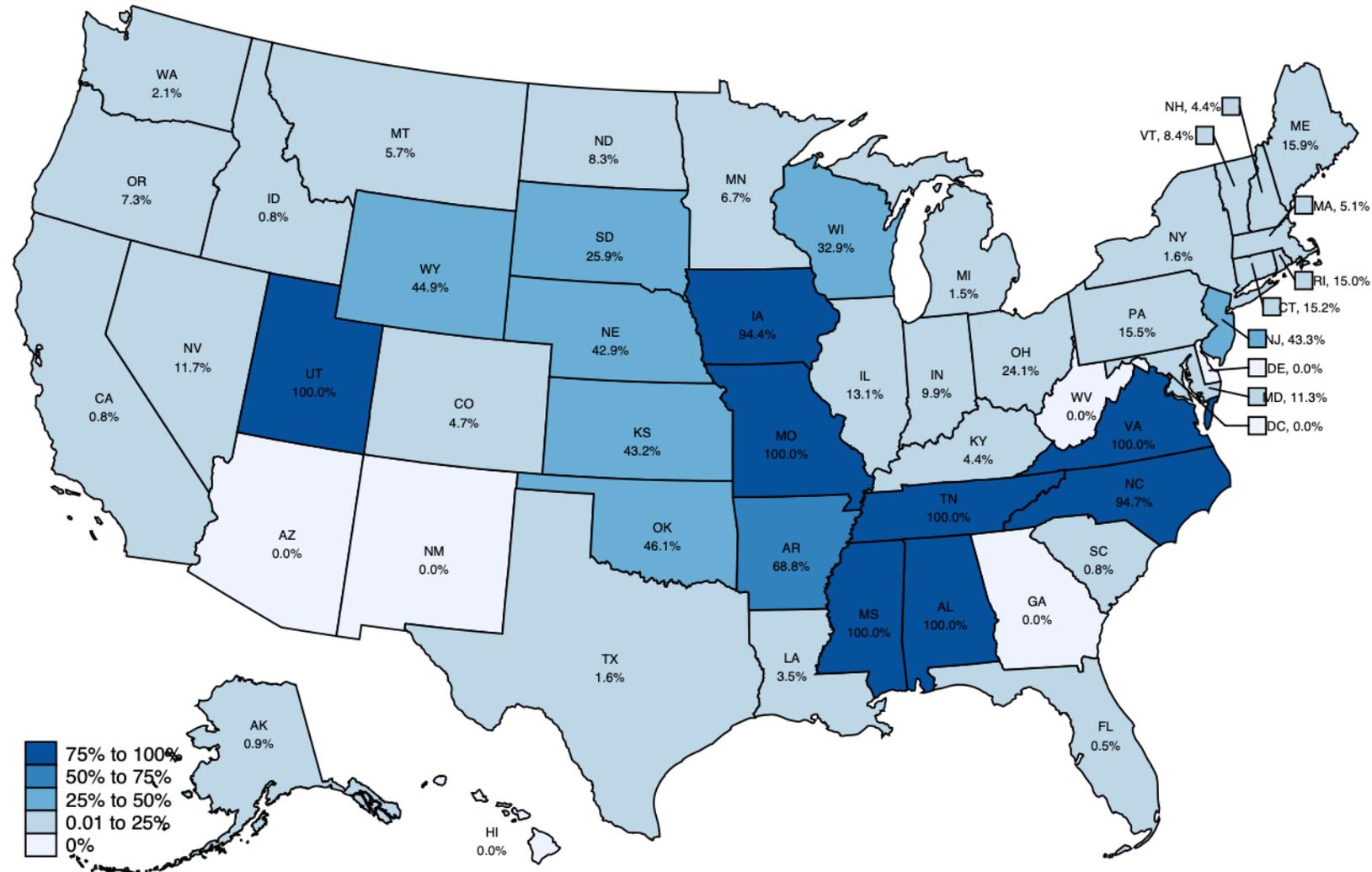
# Montana Data

8 schools have personal finance graduation requirements:

- Absarokee, Anaconda Sr, Box Elder, Hamilton, Polson, St Ignatius, Sweet Grass Co, Victor High schools

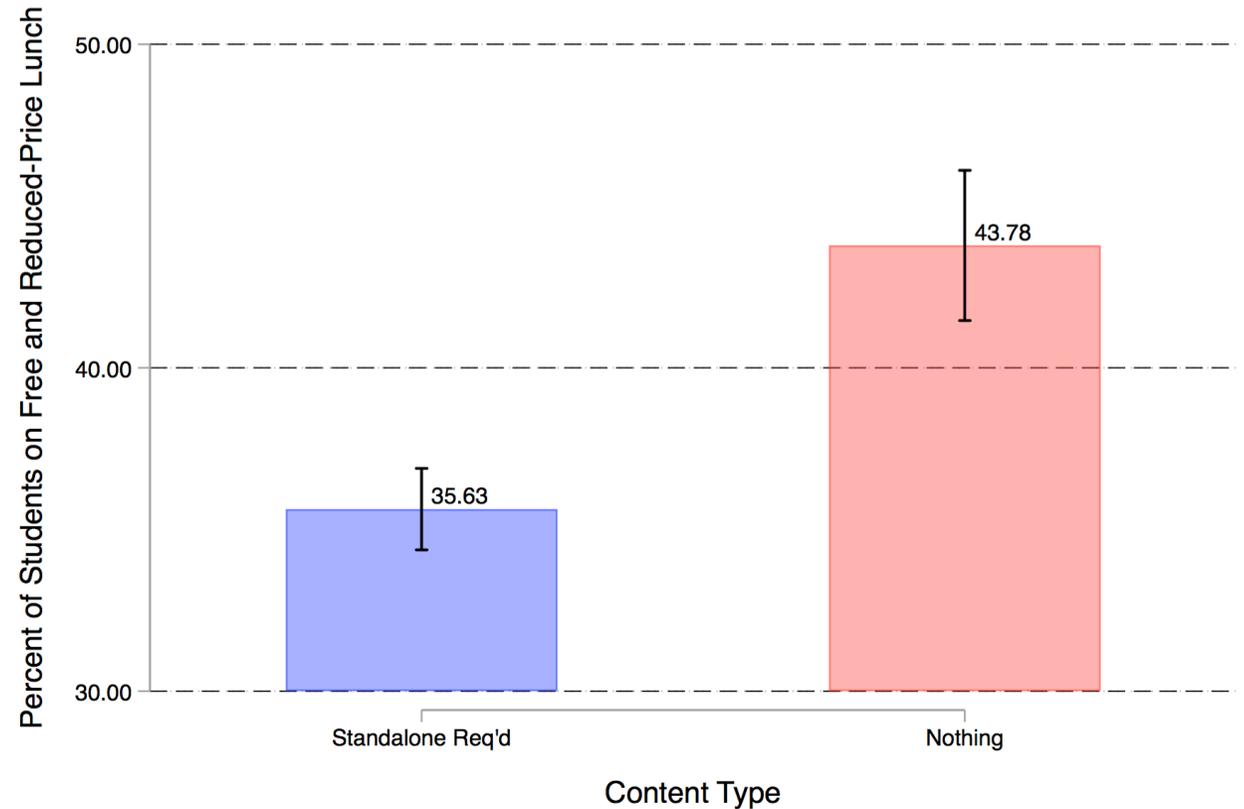
Currently ranked 29/50 states in terms of financial literacy access.

# Fraction of students in schools with standalone PF requirements (2021-2022 AY)



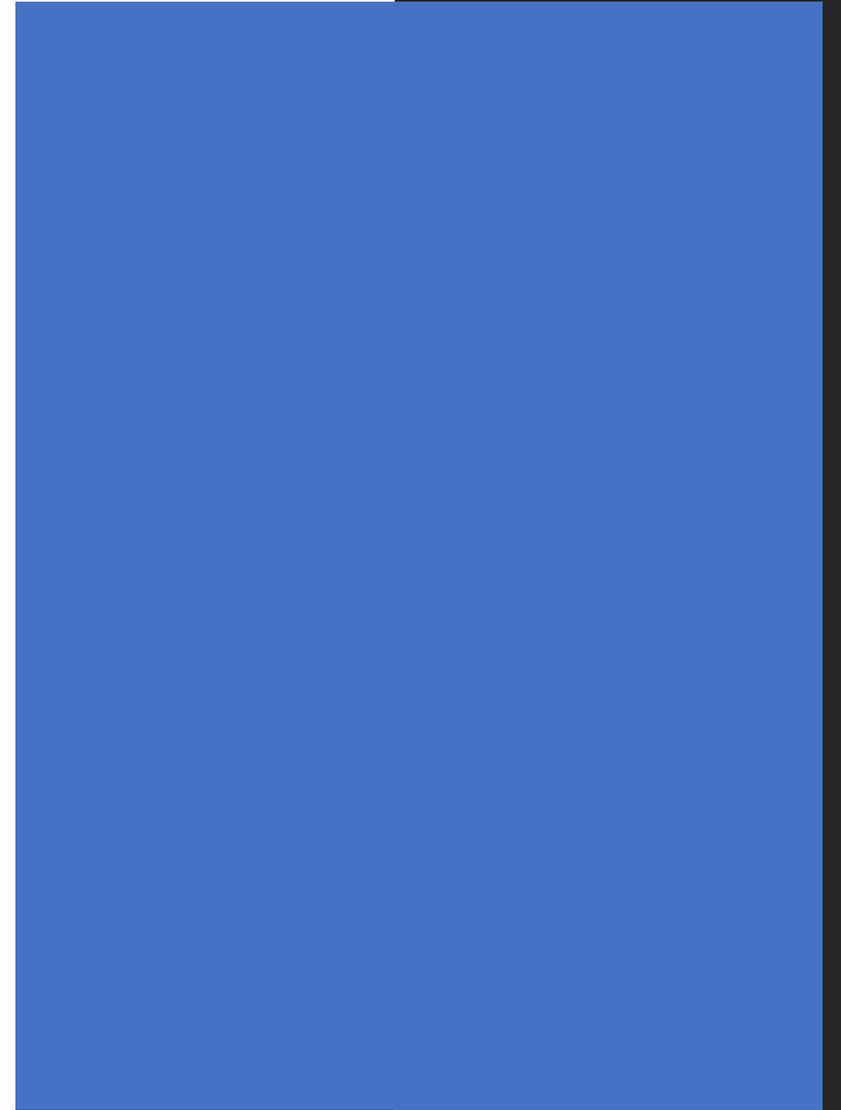


Equity in access:  
Schools with PF  
graduation  
requirements serve  
fewer students who  
qualify for free or  
reduced-price lunch



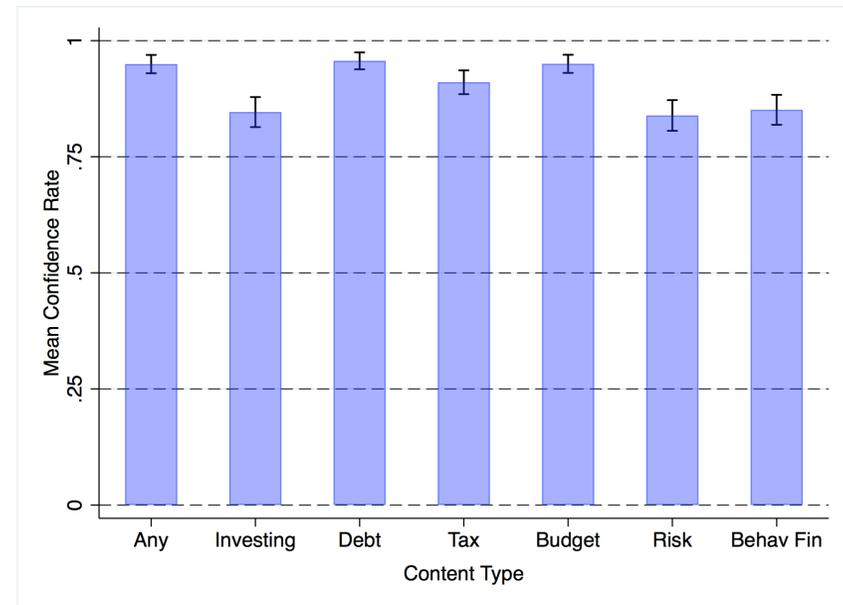


What are the  
potential costs of  
requiring personal  
finance in schools?





# Costs with adding PF guarantees



## Are teachers prepared?

- In 2020, over 95% of teachers felt confident in teaching PF, and this is similar among teachers without licensure related to PF.

## Research shows benefits to teachers!

- increased financial literacy and savings rates.

## G53 Network Working Paper Series

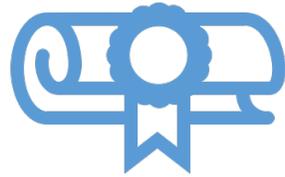
Working Paper 2021-1

**Is school-based financial education effective?  
Immediate and long-lasting impacts on  
students and teachers**

*Veronica Frisancho*

DECEMBER 2021

# Resources & Implementation



**High-quality, free of charge teacher training and accreditation**

[ngpf.org/certification-course/](https://www.ngpf.org/certification-course/)



**High-quality, free of charge curriculum**

<https://www.ngpf.org/curriculum/>

## Montana Data:

- 358 teachers in MT have accounts on NGPF
- Teachers have completed 1,293 hours of PD with NGPF



# Implementation: Where does PF live?

Most states put PF in Social  
Studies

Research says: not math!

## Key findings

- c) **For many students, Maths is not the most effective curriculum area for learning about personal finance.**  
Maths tends to result in students fixating on formulas and calculations without understanding the underlying concepts. Many students also dislike Maths, resulting in more disengagement.
- d) **Most students appear to be good savers, however there is evidence that this is passive rather than active, and they are just not spending their income.**  
Most students spoke about how much they had saved, however on closer examination, these students do not have a lot of expenses. Discussions with older students who did have expenses revealed that they did not always know how to moderate spending in order to save.
- e) **Stories are important for learning.**  
Students who could recall financial concepts would often be recalling an experience or something from history when talking about it. This indicates that stories may be more effective in communicating financial concepts.



# Parting Thoughts

- Montana students deserve the opportunity to start their adult lives with strong financial footing.
- Learning how to avoid costly financial mistakes, choose smart loan options, build credit, and save for emergencies allows young Montanans to build strong financial lives.
- Having a financially literate society benefits the broader population by expanding the tax base, reducing reliance on the safety net, and allowing Montanans to stay in state to start new businesses.



## Contact

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Twitter: @carly\_urban

## Resources:

- Blog post on the causal effects of financial education: <https://www.ngpf.org/blog/advocacy/dr-carly-urban-guest-post-what-happens-when-states-guarantee-personal-finance-for-all-high-schoolers/>
- 2021-2022 Report on financial education in schools: [https://papers.carlyurban.com/HSReport\\_2022.pdf](https://papers.carlyurban.com/HSReport_2022.pdf)
- Meta-analysis brief: [https://www.finrafoundation.org/sites/finrafoundation/files/Financial-Education-Matters-Testing-Effectiveness-Financial-Education\\_0.pdf](https://www.finrafoundation.org/sites/finrafoundation/files/Financial-Education-Matters-Testing-Effectiveness-Financial-Education_0.pdf)
- Meta-analysis in schools research: <https://www.sciencedirect.com/science/article/abs/pii/S0272775718306940>
- Brief version of teacher confidence survey: [https://papers.carlyurban.com/TeacherSurvey\\_brief.pdf](https://papers.carlyurban.com/TeacherSurvey_brief.pdf)
- Data and research on financial education at [www.carlyurban.com](http://www.carlyurban.com)