

BETTER BORROWING

How State-Mandated Financial Education Drives College Financing Behavior

NATIONAL ENDOWMENT FOR FINANCIAL EDUCATION

ABOUT THIS EXECUTIVE SUMMARY

This summary presents key findings from *The Effects of State Mandated Financial Education on College Financing Behaviors* by Carly Urban, Ph.D., associate professor of economics at Montana State University, and Christiana Stoddard, Ph.D., professor of economics at Montana State University.

The full report, available at www.nefe.org, documents new research funded by the National Endowment for Financial Education® (NEFE®) to understand how K-12 financial education mandates impact postsecondary education outcomes for young adults. Specifically, the paper addresses how personal finance graduation requirements in high school change whether or not young adults attend college, the types of institutions attended and the methods by which individuals finance their postsecondary educations.

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A REMEDY FOR RELIEVING COLLEGE FINANCING STRESS

As student loan reform continues to dominate national discourse, a NEFE-funded study shows that financial education in states with state-mandated personal finance graduation requirements causes students to make better decisions about how to pay for college. It increases applications for aid, federal aid taken, and grants — all while decreasing credit card balances. Put simply, financial education makes better borrowers.

For most college-bound high school students, financing postsecondary education is their first large financial decision. However, many students don't have the necessary knowledge to appropriately address their options. Less than one-third know how to compare loans, over half do not calculate future payments, and over half wish they could change their college financing decisions.

It's clear there's an opportunity to better equip students to shape the course of their early financial lives. Many feel that financial education can play a significant role.

This study examines positive effects of state-mandated financial education graduation requirements. As of 2017, 25 states have implemented mandates for personal finance education prior to graduation.

The good news is that mandated requirements do help. Exposure to financial education in these states shifts students from all backgrounds from high-cost to low-cost financing, thus changing student behavior and driving better outcomes when it comes to paying for college.

STUDY HIGHLIGHTS



This NEFE-funded study is the first to determine the causal effect of financial education graduation standards on how incoming four-year college students make initial decisions about financial aid. It finds that graduation requirements cause students to shift from high-cost to low-cost financing, although these effects vary by family background.

State-mandated financial education graduation requirements:

- Increase the likelihood that students will apply for financial aid.
- Increase acceptance of both grants and subsidized federal loans.
- Decrease private loan amounts for borrowers.
- Decrease the likelihood of carrying a credit card balance.

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.

In addition to average effects, there are important differences in borrowing based on students' family backgrounds and relative levels of affluence. This is determined by the family's expected financial contribution (EFC) to college.

DEFINITIONS:

Stafford loan: Stafford loans originate from the federal government and are offered at low fixed interest rates and have more flexible repayment plans and protections than private loans. They can be either subsidized or unsubsidized. A subsidized Stafford loan is offered to students based on demonstrated financial need and does not accrue interest while in college or during deferment. An unsubsidized Stafford loan requires a borrower to pay back interest that has accrued while they were enrolled in college.

Expected Family Contribution: EFC is based on measures related to income, assets, state of residence and the enrollment in higher education of other family members. As a data point in this study, it captures family income and wealth and any correlated factors. For example, higher-EFC families are likely to have more financial knowledge and greater access to credit markets. EFC also determines eligibility for need-based aid at both the federal and state level.

STUDENTS FROM FAMILIES WITH BELOW MEDIAN EFC (<$5,000)	STUDENTS FROM FAMILIES WITH ABOVE MEDIAN EFC (>$5,000)
Increase their acceptance of subsidized Stafford loans at a rate that is three times larger than more affluent students.	Decrease private loan borrowing by roughly $2,400 (among those who borrow loans).
Exhibit a decrease in holding a credit card balance.	Are no more or less likely to hold a credit card balance or work while enrolled.
Exhibit a decrease in working while enrolled.	

FEDERAL LOANS: CAN MORE BE BETTER?

The increase in federal loans indicates that students understand the better borrowing terms offered by subsidized federal student aid when compared to other sources, such as private loans and credit cards.

Data show that students who take on more public loans — and carry reduced credit card balances — largely come from families with lower EFC.

For these lower-EFC students, financial education also reduces working while enrolled, which could make these students more likely to persist and graduate in the long run.

For students with higher EFCs who typically have greater access to other financial means, financial education decreases the amount they take out in private loans.

Understanding these differences can inform policy that encourages a more tailored approach over one-size-fits-all postsecondary education financing strategies.





ABOUT THE STUDY

This analysis compares incoming freshman at four-year institutions from states with personal finance graduation requirements before and after implementing the requirement to comparable students in states without a mandate.

The bulk of the analysis draws on data from the National Postsecondary Student Aid Study (NPSAS), a nationally representative study of students enrolled in institutions of higher education.

Focusing on incoming freshmen straight from high school is important because:

- It captures students' initial decisions on how to finance their postsecondary education.
- It prevents contamination from additional financial education/counseling offered by colleges and universities.
- The age window reduces any discrepancy between a student's reported state of residence and the unreported state where they attended high school.

The main body of the analysis is conducted for students at four-year public and private institutions for several reasons:

- Tuition and aid packages tend to be larger and more consistent across institutions at this level.
- Students at two-year and for-profit schools are much less likely to enroll immediately after high school.

Because the NPSAS data include only enrolled students, researchers use data from the Current Population Survey (CPS) and the Integrated Postsecondary Education Data System (IPEDS) to examine enrollment and type of institution chosen for all freshmen.

NPSAS SAMPLE AVERAGES

90 percent of incoming four-year freshmen apply for some type of aid.

55 percent have a Stafford loan.

11 percent have private loans.

Conditional on having a loan, average private loan amounts are **$7,065**. Average Stafford loans are **$2,871**.

Nearly **three in four** receive some type of grant or scholarship (typically Pell grants).

45 percent work in some capacity while a college freshman.

About **10 percent** hold a balance on a credit card in their freshman year.

NPSAS sample is nearly **55 percent** female, **70 percent** white, and just over 18 years of age; and **97 percent** of students are dependents.

EFCs average about **$14,700**, meaning parents potentially are able to contribute approximately that amount annually.

About **20 percent** have parents without any college education.



FOCUS GROUPS: IN STUDENTS' OWN WORDS

The researchers also conducted focus groups: one in a public university in a state that has personal finance graduation requirements, and one in a public university in a state that has no personal finance graduation requirements. In-state students were asked about how personal finance coursework influenced their postsecondary financing decisions. If they did not receive financial education, students were asked what components would be desirable for such a course to improve decisions.

- Many students describe how their parents don't know enough to help them figure out how to finance college.

  "My husband and I paid my first semester out of pocket. That hurt. And we're, like, there has to be another way. So that's when I started applying for Pell grants, scholarships, everything I could find. But same thing, I just didn't know."

- Many students report not receiving enough specific information in high school to figure out how to pay for college. Those who self-identified as good students felt particularly overlooked.

  "…they make the assumption that you have a certain baseline level of knowledge about financial aid by virtue of being a student. Which really doesn't help the student. So you hear all these lofty terms, right, like 'Hey, you should get a scholarship.' And it's like 'Yeah, I should, but how?' 'You should get financial aid.' 'Yeah, yeah!' You know, and that's where the conversation ends.

  "So . . . until you make that initiation yourself…unless you got your parents or somebody that you know really harping home about how important it is, it's going to take you longer. Like what questions do I even ask?"

- Students frequently credit specific teachers or individuals as key in getting information and are mixed on whether counselors are the most helpful source of information.

- Students frequently articulate the need to know about the specifics of their own situation. They describe needing or wanting help in a number of areas, and high schools vary in terms of how much they support students. These include help with budgeting and financial skills, scholarships, Pell grants, loans, the interaction between types of awards, applications, and other decisions such as whether to go or to stay in college, which school to attend and which major to declare.

  "It would have been nice if . . . in high school they offered . . . a life skills class like how to pay taxes and how to do finances . . . maybe make this one mandatory because . . . it would have been nice to know that stuff now. Like there's a lot of things in high school that I hated, but now I appreciate because college is hard. And I think that's one of them."

FINANCIAL EDUCATION MANDATES IN HIGH SCHOOLS



In the last decade, states increasingly imposed requirements for personal finance coursework in high school that aims to reduce financial distress among young adults.

The standard material typically covers interest rates, saving, investing and borrowing. Each state customizes its standards to fit the population and relevant concerns of its residents.

In addition to standard financial education content, individual graduation standards cover a range of specific topics, including mortgages, auto loans, stock markets, checking and savings accounts, insurance, income volatility, shopping for loans, credit scores, credit cards, timely payment and financing postsecondary education. Learning personal finance content may improve student aid choices several ways:

- Explicit instruction on financial aid applications may result in fewer errors or more timely applications, generating more financial aid offers.
- Learning to shop for interest rates could shift students from private loan and credit card borrowing toward lower-cost federal loans.
- Emphasizing the potential future burden of student loan debt could increase students' motivation to seek grants and scholarships earlier in the financial aid process.

ALL MANDATES ARE NOT EQUAL

For the purpose of this study, a state is determined to have a mandate if students are required to complete financial education coursework *in order to graduate.* For example, Nebraska, New Mexico and South Dakota require schools to offer a personal finance course, but do not require students to take it. This is the only policy in Nebraska and New Mexico, so they are not considered to have a mandate. However, South Dakota requires students to take either an economics course or personal finance course, so it is classified as having a mandate.

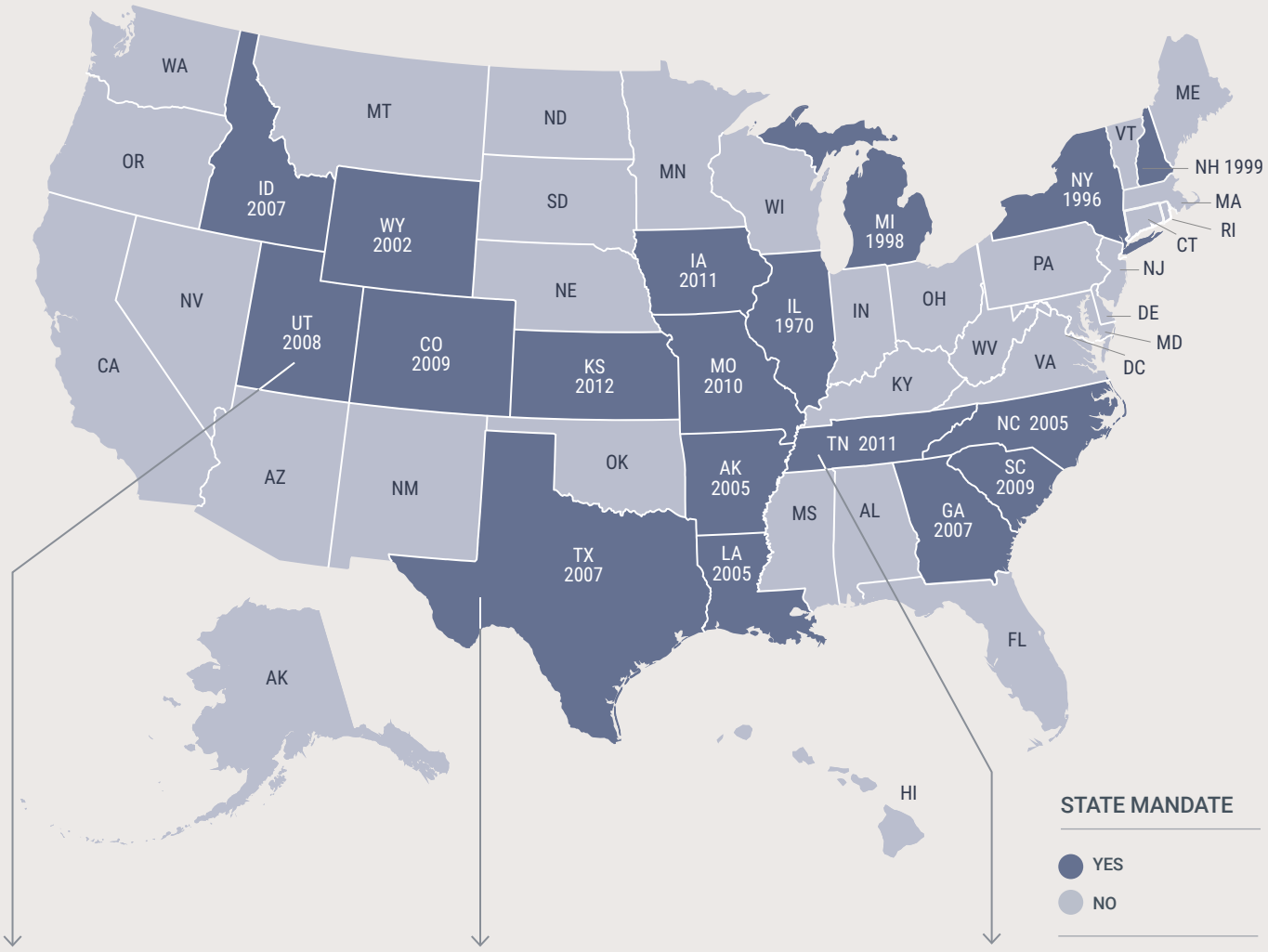
Also, research shows that mandates implemented since 2012 are more effective. While older mandates show mixed evidence, newer mandates lower defaults, improve credit scores, decrease non-student debt, and modestly increase student debt.



FINANCIAL EDUCATION IN HIGH SCHOOL: STATE BY STATE

The type of mandate and required content varies widely. States often include student loan and financing postsecondary education content explicitly in the state standards, as is the case in Utah, Texas and Tennessee.

States Requiring Personal Finance Prior to High School Graduation, 2017



UTAH

Students are taught the mechanics of the process and the benefits of completing the Free Application for Federal Student Aid (FAFSA).*

*The Free Application for Federal Student Aid (FAFSA) is a form that is required by the United States government to determine eligibility for and to receive student financial aid.

TEXAS

Standards require that students understand how to complete the FAFSA, research and evaluate scholarship opportunities, compare student grant options, analyze student loan options, evaluate work-study options, and investigate nontraditional methods of paying for postsecondary education.

TENNESSEE

Standards require students to complete the FAFSA application and identify strategies for reducing the overall cost of postsecondary education, including the impact of scholarships, grants, work study and other assistance.



RESULTS

Initial analysis examines early decisions about where to attend college, and then focuses on specific components of financing behavior detailed below.

COLLEGE ENROLLMENT DECISIONS UNAFFECTED

Personal finance education requirements do not affect the biggest and most basic financial decisions about college. Students exposed to financial education are no more or less likely to go to college, choose a college with a different tuition level, choose a different type of education, choose a more selective college, or choose a different financing option based on the initial college choice. This suggests that student preference may be fixed, and that financial education offered in high school is too late to influence these preferences.

While financial education does not affect college attendance or institution type, it does affect how students finance their education.

APPLICATIONS FOR AID INCREASE

Students receiving mandated financial education are 3.5 percent more likely to apply for aid, which is notable because 91 percent of students in states without mandates already apply for aid.

GRANTS AND SCHOLARSHIPS: MIXED EFFECTS

Because of the increase in applications, students exposed to financial education are 1.4 percent more likely to have aid packages with grants or scholarships. Conditional on applying for aid, students exposed to financial education are no more or less likely to have a grant than those without financial education mandates. This is expected, as most students understand the value of accepting any grant aid because it is “free money.”

FEDERAL LOANS INCREASE

Personal finance graduation requirements significantly increase the average incoming freshman students' use of federal aid for financing a four-year degree. These students are 9.5 percent more likely to take out a Stafford loan. Furthermore, acceptance of subsidized Stafford loans, which do not accrue interest during college, increases by 12.9 percent.

While most students understand that grants are a wise financial choice, it may be less obvious whether accepting federal loans is a smart financial decision. Required financial education encourages students to accept additional federal loans, especially those that are subsidized and therefore interest-free during college. This provides evidence that students are making more informed decisions.

These results are similar across lower- and higher-EFC groups, although they are larger in magnitude for lower-EFC students.

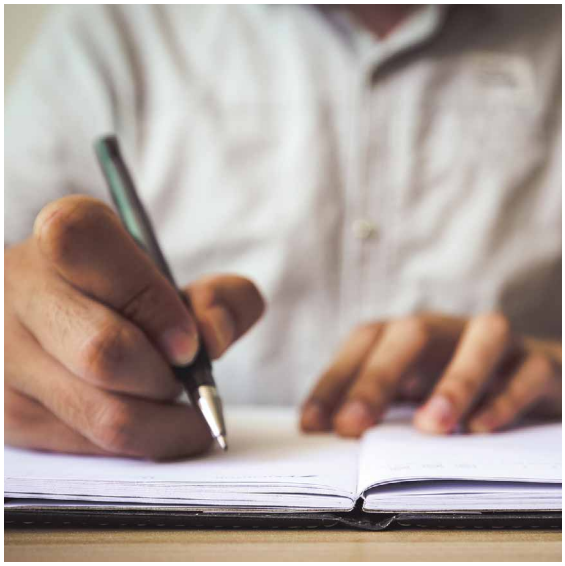
PRIVATE LOAN BALANCES DECREASE

There is no evidence that fewer students are taking out private loans because of mandated financial education. However, when subject to personal finance requirements, those who do take out private loans reduce their loan amounts by $1,300 on average and by $2,350 for students with higher EFCs.

The reduction in private loan amounts for students with higher EFCs suggests that financial education encourages these students to identify alternative methods of payment not included in the analysis. There are other channels through which more affluent households can pay for education, such as informal networks for lending or selling of assets.

Private borrowing among lower-EFC families remained unchanged, likely due to a lack of access to the private loan market or less access to alternative financial means to substitute for private loans.





CREDIT CARD USE IMPROVES

Students exposed to financial education reduce higher costs of borrowing: they are 21 percent less likely to hold a credit card balance while enrolled in higher education.

Credit cards are a common way for college freshmen to smooth consumption on purchases such as books and food, but many students may not use them optimally. This is especially true if students lack knowledge about how credit cards work or if the cards are used instead of lower-cost funds.

The decrease in students with credit card balances may mean they are covering their expenses with lower-cost options such as subsidized Stafford loans or grants. To the extent that students were overusing credit cards prior to personal finance coursework, financial education mandate policies actually may improve college students' credit card knowledge and behavior.

Lower-EFC students exposed to financial education are more likely to make the financially savvy decision to substitute subsidized federal aid for more costly credit card debt than higher-EFC students.



WORKING WHILE IN COLLEGE DECREASES

Students from families with lower EFCs are 7.8 percent less likely to be working while in school, suggesting that the additional federal aid may replace job income for these students. Freeing up time to study may improve academic performance and shorten total time in college, another cost saver.

HOW FINANCIAL EDUCATION INFLUENCES BORROWING DECISIONS

Financial education works in two ways to improve the borrowing behavior of incoming college freshmen.

1. Financial education increases subsidized borrowing at advantageous federal rates. This increase suggests that students may have mistakenly assumed they were ineligible for aid when they were not or may have chosen to decline subsidized loan offers.
2. Graduation requirements reduce more costly forms of borrowing, including credit cards (for students from less affluent backgrounds) and private loans (for students from more affluent backgrounds).

ELECTIVE FINANCIAL EDUCATION

Even in states where personal finance graduation requirements do not exist, high schools can decide to offer a financial education course.

To understand how voluntary financial education course offerings affect student financial aid decisions, this study tracked students in Montana — a state without a mandate — from high school to the two largest four-year campuses in the state using data from the Montana University System (MUS).

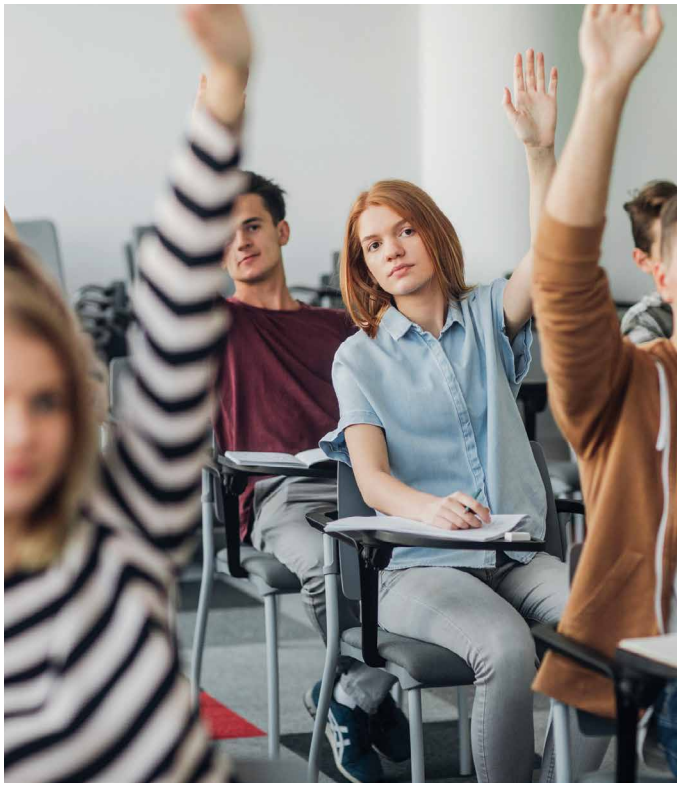
Researchers directly contacted each high school in Montana to determine whether or not it offered a stand-alone personal finance course and in what years. Administrative transcript data from the Office of Public Instruction was used to confirm that students generally take these courses in their junior or senior year, and students were matched based on their age to whether the course would have been offered during their high school years or not.

Ultimately, the analysis finds that elective offerings of financial education does not influence average financial aid packages and has no effect on having subsidized Stafford loans, unsubsidized Stafford loans or a grant. The presence of elective courses when mandates are absent does not appear to have the same positive effects as state requirements for all students.

MONTANA AS A CASE STUDY

MUS data provide detailed individual-level college funding information, including the students' high school, demographic information, campus attended and degree pursued. Additionally, data identify the source of funds (such as federal, institutional, state or other), the type and amount of the award, and the amounts of federal and state loans.

While Montana is a relatively low-income state, it is nationally representative when it comes to average student debt levels, tuition as a fraction of state personal income, graduation rates and Pell grant levels.



IMPLICATIONS AND RECOMMENDATIONS



REQUIREMENTS ENHANCE STUDENT OUTCOMES

Mandated personal finance requirements are important for achieving strong outcomes.

This study shows that simply offering a course is not enough to change college financing behavior. There was not enough information to determine why: whether it was low take-up, poor implementation, or the type of student voluntarily taking the class. Other NEFE research shows better outcomes when using curricula containing the *Five Factors for Effective Financial Education:*

- Well-trained educator and/or tested e-learning protocol
- Vetted/evaluated program materials
- Timely instruction
- Relevant subject matter
- Evidence of impact (evaluation)

BENEFITS EXTEND BEYOND COLLEGE FINANCING DECISIONS

High school financial education graduation requirements can significantly impact key student financial behaviors beyond college financing decisions.

Personal finance coursework is geared toward building general skills and as a result, benefits of financial education curricula extend beyond a single financial aid decision. Previous literature finds that mandated financial education in high schools also reduces non-student debt, increases young adults' credit scores and decreases severe delinquencies.

This broad set of impacts suggests that mandated financial education contributes to a range of improved financial decision making among young adults beyond their formal education years.

EFFECTS ARE LIKELY UNDERSTATED — EXPECT CUMULATIVE EFFECTS OVER TIME

This study examines only initial borrowing decisions of incoming college freshmen. It's likely that there are cumulative effects of the high school requirements over the course of a student's college career, including effects on persistence, graduation and post-education financial behaviors.

BENEFITS OUTWEIGH THE COSTS OF FINANCIAL EDUCATION REQUIREMENTS

Building financial capability benefits individuals and communities, generally outweighing the costs involved in implementing personal finance graduation requirements. These expenses can be trimmed by incorporating personal finance concepts into already-existing courses and by using free quality curricula such as the NEFE High School Financial Planning Program[1] and Jump$tart Financial Foundations for Educators.[2,3]

LOOK BEYOND THE AVERAGES

Increases in federal loans and decreases in carrying a credit card balance are largely from students with lower EFCs, while the decreases in private loans stem from more advantaged students with higher EFCs. Students benefit more from resources, instruction and policies that address their specific circumstances rather than one-size-fits-all college financing prescriptions.

[1] "Evaluation Report 2018: NEFE High School Financial Planning Program (HSFPP)" Available at www.hsfpp.org/Portals/0/Documents/2017-NEFE-HSFPP-impact-study-summary.pdf?ver=-2.041018124514

[2] "Prepped for Success: A Study of Teacher Training, Financial Literacy and Classroom Outcomes," Champlain College Center for Financial Literacy, December 2015. Available at www.champlain.edu/centers-of-experience/center-for-financial-literacy/report-prepped-for-success

[3] "Combining Adults Education and Professional Development Best Practice to Improve Financial Education Teacher Training," Billy Hensley, Ph.D.; Jesse B. Jurgenson; Lisa-Anne Ferris, Ph.D., published September 2015. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2655682

NEXT STEPS FOR THE RESEARCH COMMUNITY

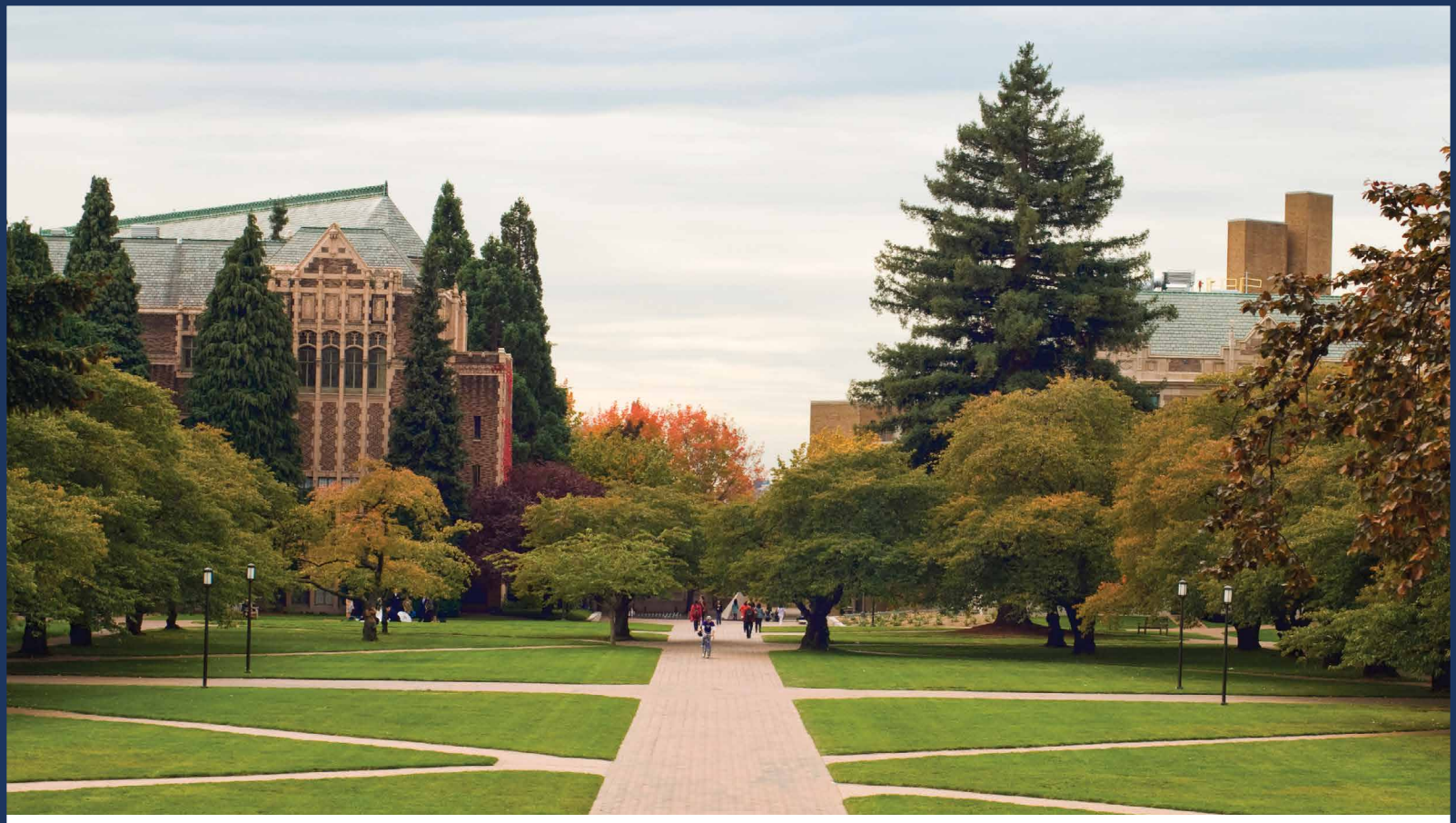
Accurately studying state-mandated financial education depends on access to details about the mandates themselves and about the courses offered. While many organizations and researchers strive to compile this information, they are met with multiple barriers.

- Mandates are relatively easy to track, but implementation varies widely and can change frequently. For example, are the mandates funded and does that funding change year to year? Are specific resources required or recommended? Are these communicated to schools or easily accessed? How are teachers chosen and trained to provide instruction?
- The definition of what constitutes financial education is not standardized and includes very different types and lengths of interventions. Clarification of the details of what is called financial education at the school level is necessary to conduct research accurately and produce robust findings. However, collecting this data is time-consuming, expensive, requires updating and is not academically rewarded.

This study approaches data collection differently to improve the precision of research, using researching assistants to contact every high school in Montana directly to determine the nature of the school's financial education offerings.

There is value extending this effort to all states and schools. For there to be rigorous research conducted on the effectiveness of financial education, there needs to be easily accessible data about what states are actually doing. Perhaps investing in such a data set is the best next step for the field. Accurately reflecting the outcomes of financial education depends on it.





STUDY METHODOLOGY

The study uses a difference-in-difference strategy to determine the causal effect of financial education graduation requirements on postsecondary financing decisions using data from the National Postsecondary Student Aid Study (NPSAS). The NPSAS is a nationally representative study of students enrolled in institutions of higher education. Results use data from the 1999, 2003, 2007 and 2011 waves of the survey. The sample is restricted to U.S.-born students between the ages of 17 and 19 in their first year of higher education who graduated in the same calendar year or one year prior to enrollment. Students who did not complete a traditional high school degree were eliminated, resulting in a sample of 44,729 students. The analysis is supplemented with data from the Current Population Survey (CPS), the Integrated Postsecondary Education Data System (IPEDS), and the Montana University System (MUS). More information can be found in the full report at www.nefe.org.

THE NATIONAL ENDOWMENT FOR FINANCIAL EDUCATION

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