## Financial Education in High Schools Across America

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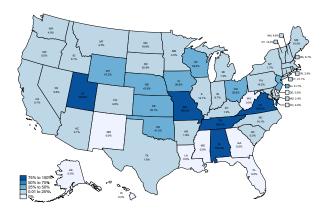
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While five states require students to complete standalone personal finance courses prior to graduating from high school, additional states require that schools incorporate financial literacy standards into required curricula, others require schools offer a class that covers financial literacy, and other states are silent on financial literacy matters. This means that some schools are left to satisfy state requirements in a variety of ways, and others are completely free to decide which classes to offer and require. Given the returns to financial education requirements can be quite high, understanding where financial literacy is offered and required across America is important.

I analyze hand-collected data from 2019-2020 course catalogs within 7,611 U.S. public high schools, including 14,255 hand-coded specific courses. These data represent 63.31% of the population within U.S. high schools across America. I categorize each school into its maximum standard in the following order: standalone requirement, embedded requirement, standalone offering, embedded offering, and no offering or requirement. I choose this ordering, since requirements are binding for all students, whereas offerings are available to those who select into them.<sup>3</sup>

- 18.35% of students in U.S. schools with online course catalogs require students to complete a course in personal finance prior to receiving a high school diploma.
- When excluding the five states whose policies mandate the standalone course requirement, 9.05% of students are required to complete a standalone course in personal finance.

Figure 1: Maps of Standalone Requirements Across America



- 19.09% of students in non-mandate states are not required to complete a standalone course but are required to complete a course that includes but is not entirely focused on—financial literacy concepts.
- 45.89% of students in non-mandate states have no financial literacy requirements but do have access to a standalone personal finance course.
- 17.98% of students in non-mandate states have no financial literacy requirements or access to a standalone course but do have access to a class that includes—but is not entirely focused on—financial literacy topics.
- 7.19% of students are in schools with no financial literacy content in their course catalogs.

Figures 1-2 show the fraction of students in schools with standalone and embedded course requirements, respectively.

## **Findings**

There are four main takeaways from this research.

First, school resources are important. Student-teacher ratios, even after accounting for total expenditures per pupil, local area incomes, house prices, poverty rates, and the racial and ethnic composition of students, are negatively correlated with standalone course requirements and positively correlated with a school having no requirement or offering. It is not surprising that schools with less capacity have fewer opportunities to integrate financial education course require-

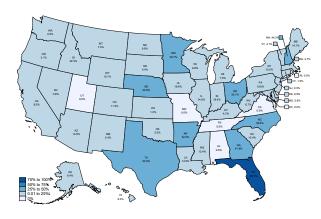
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<sup>&</sup>lt;sup>1</sup>The five states with standalone course requirements are AL, MO, TN, UT, and VA. Another two will be added for the graduating class of 2021: IA and NC.

<sup>&</sup>lt;sup>2</sup>Requiring all high school graduates to complete some amount of financial literacy education increases credit scores and decreases default rates (Urban et al., 2018; Brown et al., 2016), lowers non-student debt (Brown et al., 2016), shifts student loan borrowers from higher to lower interest financing (Stoddard and Urban, 2019), improves student loan repayment (Mangrum, 2019), reduces payday lending (Harvey, 2019), and increases savings for some low-income households (Harvey, 2020).

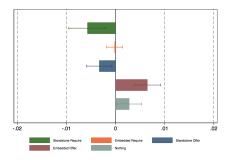
<sup>&</sup>lt;sup>3</sup>Further, there is no causal effects of offering personal finance courses on student loan decisions, whereas requiring personal finance, even if it is embedded in another course, improves student loan borrower decisions (Stoddard and Urban, 2019) .

Figure 2: Maps of Embedded Requirements Across America



ments or offerings. These schools may also struggle to offer other important courses, and stretching teachers too thin might have consequences for overall academic performance. It is likely that schools presently strapped cannot push financial literacy education without facing potentially consequential opportunity costs. Recruiting more teachers in schools with high student-teacher ratios is one potential avenue forward, but I am not the first to say that additional high-quality teachers are needed in public schools across America.

Figure 3: Student-teacher Ratios Predict Financial Education Access



Notes: Each bar shows the change in the likelihood of having each specific course offering or requirement associated with a one unit increase in STRs. 95% confidence intervals around the estimates.

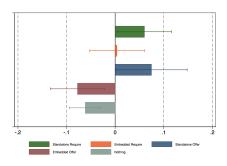
The model controls for: expenditures per pupil,

urban/suburban/rural location of the school, race/ethnicity of the student population, median household income, local area poverty, median area house values, and the local unemployment rate.

Second, high schools in districts with higher 8th grade Math test scores, even after accounting for local demographic and economic characteristics, had a greater likelihood of having a standalone course requirement or a standalone course offering and a lower likelihood of having no requirements or offerings. This suggests that perhaps students with the greatest access to strong math programs in early education also have the greatest access to rigorous financial literacy instruction. There is no correlation between course requirements or offerings and ELA scores, meaning it is not necessarily the case that better-performing schools in general have more financial literacy instruction. Pol-

icymakers in the future should consider targeting financial education in schools where math performance is ex-ante low, as these students may have the greatest value-added from financial literacy coursework.

Figure 4: 8th Grade Math Scores Predict Financial Education Access



Notes: Each bar shows the change in the likelihood of having each specific course offering or requirement associated with a one standard deviation increase in Math scores. 95% confidence intervals around the estimates. The model controls for: expenditures per pupil, the school's student to teach ratio, urban/suburban/rural location of the school, race/ethnicity of the student population, median household income, local area poverty, median area house values, the local unemployment rate, ELA test scores, and the fraction of students receiving FRPL.

Third, state policies mandating schools incorporate financial literacy into a required course are highly correlated with whether or not schools within these states have an embedded course requirement. A state policy requiring financial literacy be incorporated into a required course increases the likelihood of having an embedded requirement by 12 percentage points but is not associated with whether or not a school has a standalone requirement. When legislative hurdles inhibit states with extensive local control from introducing standalone course requirements, embedding personal finance into currently required courses is one way forward.

That said, it is not a perfect way forward. State-level embedded course requirement mandates do not result in full compliance. While this lack of compliance could be because course catalog descriptions do not detail financial literacy instruction in all schools, it could also be because state departments of education have trouble auditing embedded course mandates. In our estimate only 36.44% of schools or 37.96% of students within states that have embedded course mandates have either a standalone or embedded course requirement.

Fourth, while there at first appear to be demographic and economic differences across schools with standalone course requirements and no requirements or offerings, these differences do not persist after controlling for whether or not the school is in an urban, rural, or suburban area. These findings suggests that personal finance coursework is less correlated with socioeconomic status than previously expected.

For a full copy of the report, see http://www.montana.edu/urban/Report.pdf.

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