

Exploration of Teacher Preparedness by State Financial Education Policy

Previous studies have examined the effectiveness of school-based financial education, focusing mainly on student outcomes or teacher preparedness. However, previous studies have not examined the link between state policies and teacher preparedness. We expect teachers in states with financial education standards to be more prepared than teachers in states without standards and those teachers in states with mandated testing to be the most prepared. The goal of this study is to examine that link between state policies and teacher preparedness by building upon previous work from Way and Holden (2009), a study on teacher preparedness, and Gutter, Copur, and Garrison (2010), a study on the effectiveness of state policies; this study asks does teacher preparedness differ by the state's policy on financial education standards?

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Background

Way and Holden (2009) looked at California, Colorado, Iowa, Wisconsin, Pennsylvania, Virginia, Georgia, and Rhode Island to examine teacher preparedness in personal finance. They found that only a minority of teachers 29.7% are teaching personal finance material although the majority of teachers agree that there is a need for financial education in schools (p.76). They attribute this in part to teacher preparedness citing that perceived preparedness limits 'capacity to teach' personal finance education. Way and Holden (2009) categorize state standards as being content only or testing. Content only refers to states that have standards for content but no testing. States categorized as having testing state standards are states that have content and testing standards. They excluded the category of no standards.

Gutter, Copur, and Garrison (2010) looked at students from Florida, California, Iowa, Rhode Island, Alabama, Vermont, Wisconsin, Indiana, Arizona, Illinois, Utah, Kentucky, Virginia, Georgia, and Missouri to examine the effect of financial education state policies on student outcomes in financial behavior. They found that most students are not taught personal finance unless it is suggested by the state standards. Gutter, Copur, and Garrison (2010) categorized states into six categories: no standards, standards only with no required implementation, standards with required implementation, course required, assessment required and course and assessment required. Their results suggested that states should adopt a policy for financial education because it was shown that students from states with a course and an assessment requirement and states with only standards had more financial knowledge than students from states with no standards (Gutter, Copur, and Garrison, 2010, p.56).

Previous literature on effectiveness of policy on financial education

Bernheim, Garrett and Makai (2001) performed a cross-sectional household survey in order to determine if state mandates for financial education had lasting effect on student outcomes in terms of saving behavior (p. 436). They found that individuals who live in states with mandates are increasingly exposed to financial education and tend to save at higher rates in their adult lives (p.462).

Determining how to measure preparedness

Teacher preparedness in the area of consumer and financial education is an under research and studied area. Way and Holden (2009) point out in their research that only two studies could be found that examined this area of study with regard to current and prospective teachers. The lack of study in this area of education could mean that the financial education is not being taught as effectively and efficiently as possible. Way and Holden (2009) further point out that these two studies that were conducted, were done so in the 1970s. Personal financing has changed

greatly since then, and will continue to evolve. With an ever changing field, it is vital that teacher is and feel prepared to teach classes on financial education.

Way and Holden (2009) highlight Lofgren and Suzuki (1979) as one of the two studies on current and future teachers within consumer and financial education. Lofgren and Suzuki (1979) used a 50 item instrument and mainly measured the teachers' competency. They applied this to also meaning preparedness. These 50 questions were selected, 10 from the 5 major concepts that are outlined in the Oregon *Personal Finance Education Guide*. Their methodology was to create a survey and then mailed it out to a sample of 320 consumer education/economics/personal finance teachers in Oregon's public schools. They had a response of 185 (57.8%).

The second study that Way and Holden (2009) discuss is Garman (1979), which examines graduating teacher education students on consumer education knowledge. Garman (1979) did so by having participants take the *Test of Consumer Competencies*, which would assess the literacy of consumer educational teachers in the area of consumer education. This test measured fourteen different areas of consumer education knowledge, through a 55 item multiple choice test. The survey was mail to 540 National Council for Accreditation of Teacher Education (NCATE) member institutions, with a response of 461 (85.4%) schools. The findings were that the overall achievement does not seem to indicate a high level of comprehension of consumer education, which could in turn mean that schools are higher teachers for subjects they do not possess a high level of cognition in (Garman, 1979).

Way and Holden's measurements (2009) included two dimensions. First, the extent to which teachers felt they were competent in various personal finance subjects. Second, the extent to which teachers felt they were competent to address pedagogical responsibilities such as curriculum design for personal finance topics.

Methods

This study uses a unique dataset described in Way and Holden (2009). The sample population for this study is K-12 teachers located in eight states; two states from each U.S. census region. These states included: California, Colorado, Iowa, Wisconsin, Pennsylvania, Virginia, Georgia, and Rhode Island.

Data collection for the study consists of an initial e-mail cover letter requesting teacher participation in an on-line survey. The response rate for their study was 15%, resulting in a total sample size of 504. However when eliminating incompletes, our final sample is 393 teachers.

In order to address the research question, the sample will be grouped by a variable indicating the state's financial education standards policy. We will compare teacher characteristics to determine whether there are structural differences in teachers by state policies. Our primary variable of interest is teacher preparedness; based on the Way and Holden measurements (2009); this included two dimensions. First, the extent to which teachers felt they were competent in various personal finance subjects. Second, the extent to which teachers felt they were competent to address pedagogical responsibilities such as curriculum design for personal finance topics. We will use multiple group comparisons to explore differences among these groups. We will also replicate the Way and Holden (2009) regressions, but control for state financial education policy, in order to determine whether the policy is significantly related to the measures of teacher preparedness. Our study focuses on the aggregate competency of the teachers rather than competency by subject matter.

Results

The average teacher in our sample was experienced; with an average of twelve years in K-12 education. Teachers had limited formal training in personal finance topics. Only about 37% of the teachers surveyed had completed a college course in personal finance or related subject. About 19% had completed a workshop on personal finance topics within the previous three years. However, 30% had taught personal finance within the last three years. While some teachers did feel incompetent to teach personal finance topics, when looking at them in their entirety, most had some level of perceived competency. In fact, 83% of teachers felt somewhat competent or competent to teach at least one of the various subjects as a whole.

A regression was used to determine whether being required to provide personal finance education in the state was a related factor to teacher preparedness. The dependent variables are differing degrees of preparedness for teaching financial literacy, those being: not very competent, adequately competent, and very competent. Note that these dependent variables were collapsed to a simple dichotomy, based on Competency and Lack of Competency.

The results of the regression suggest that factors related to discipline and specific training is significantly related to the likelihood that a teacher felt competent. Those being teaching math and teaching vocational studies, such as family and consumer science and business, etc., are more likely to do this than teachers from other disciplines. This result is intuitive, as in many states these standards proscribe disciplines, such as these two, as being appropriate to house personal finance education.

The other important set of determinants, related to the likelihood of teacher preparedness, were indicators of specific training in personal finance and education. Those three factors that were found to be significant were the number of years teaching within the field of financial literacy, the completion of a course related to financial literacy, and attending a workshop on financial literacy

In summary, while many teachers felt prepared to teach at least one of the personal finance subjects, when controlling for other factors, being required to teach personal finance was not a predictor but actual training and relevant disciplines were predictors of teacher preparedness. One important implication is that teachers' sense of preparedness was improved through training in various forms. Thus, it is important that various training options continue to be made available to teachers, to support a desire to provide personal finance education in their school.

Limitations

Cannot determine if policies improve teacher preparedness

Table 1 Descriptive Statistics

	Mean	Standard Deviation
Teaching Competency Indicator	0.8306	0.39556
Teach Math	0.1252	0.33133
Teach Social Sciences	0.0855	0.27988
Teach Vocational	0.0855	0.27988
Teach Miscellaneous	0.5070	0.50045
Teach Special Ed	0.1213	0.32677
No Guidelines	0.3593	0.48030
Not Required	0.1314	0.3382
Mandatory	0.5092	0.50043
Complete Financial Literacy Related Course	0.3698	0.48323
Attended Workshop on Financial Literacy in past 3 years	0.1889	0.39191
Number of Years Teaching	12.1071	9.79441
Taught on Financial Literacy in past 3 years	0.3015	0.70262

Table 2 Results of the Logistic Regression

	B	Sig.	Odds Ratio
Teach Special Ed	.632	.186	1.881
Teach Math	.933	.049	2.541
Teach Social Sciences	1.226	.109	3.409
Teach Vocational	1.324	.084	3.758
Not Required	-.248	.570	.781
Mandatory	.234	.447	1.263
Number of Years Teaching	-.002	.905	.998
Complete Financial Literacy Related Course	.963	.004	2.619
Attended Workshop on Financial Literacy in past 3 years	.958	.077	2.606
Taught on Financial Literacy in past 3 years	.281	.384	1.324
Constant	.680	.032	1.974

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Endnotes

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