A Descriptive Study of Financial Literacy Preparedness of Teachers in North Carolina

Fafanyo Asiseh
North Carolina A and T State University
United States of America

Vereda Williams
North Carolina A and T State University
United States of America

Abstract

The study investigated the extent of preparedness of North Carolina teachers' knowledge, interest and capacity to teach financial literacy concepts. This study was based on a survey of school teachers in all the 8 school regions in the state. Major findings of the study indicated that most teachers acknowledged the importance of financial literacy education s, and a majority of these teachers expressed they were very prepared to teach the course. However they showed different comfort levels in teaching various topics within specific financial literacy courses. This study contributes to the literature on the importance of preparing teachers to teach financial literacy courses. The study also shows reveals how financial literacy is included in the curriculum of schools in North Carolina.

Keywords: Financial literacy, Educators, Teachers, North Carolina

Introduction

There is no doubt that financial literacy is important, and has reached even more importance globally since the recent financial crises. The Organization of Economic Co-operation and Development (OECD, 2014) acknowledged financial literacy as a life skill and the need for youth to be taught financial literacy globally. Bernanke (2013) reported that financial literacy has become more important, especially for young people. Financial literacy has many implications for financial behavior. For example people with a low level of financial literacy are less likely to participate in the stock market, less likely to plan for their future financially, more likely to have debt problems and less likely to plan for their retirement (Lusardi and Mitchell 2007, van Rooij et al 2011). Poor financial decisions also affects work productivity (Garman, Kim, Kratzner, & Brunson, 1999; Garman, Leech, & Grable, 1996; Joo & Grable, 2000; Kim & Garman, 2004). On the other hand when financial literacy is well planned its benefits are numerous and they include better financial decisions, well planned futures, better financial decision making strategies and better money making decisions. (Walstad, Rebeck and McDonald, 2010; O' Connell 2008, Carswell, 2009; Collins, 2007; Haynes-Bordas, Kiss, & Yilmazer, 2009; Scott, 2010). Programs such as Financing Your Future (FYF) have been used to teach high school financial literacy. The Federal Reserve's education website has information for people of all ages on financial education. Financial education programs offered in schools take on different structures, and these programs will differ significantly in terms of scope and content. For example while financial literacy taught in food and consumer sciences (FCS) courses will take on a more qualitative approach, content areas in economics and business will be more quantitative (Loibl ,s 2010).

As much as financial literacy is important in high school, most studies have focused on the students with little or no attention given to the educators and teachers who transmit the information. Few studies have considered how prepared teachers and educators are in presenting these materials. Way and Holden (2009) indicated that the vast majority of school-based educators, teacher education faculty and pre-service teachers know very little about financial education and topics related to personal finance. With the ever increasing number of states and districts adding personal finance to mandated education curricula, more teachers are being asked to teach this topic.

The Council for Economic Education reported that currently 19 states require a course in financial education to be offered, which is an increase from 14 in 2011 (CEE 2014).

Financial education criteria has been added to K-12 standards, usually in mathematics and social studies, with very little or no professional development provided; trainings covering financial concepts can offer teachers an opportunity to abundantly examine the content when they are asked to include the topic in their classes. In addition to the above mentioned points, the evaluation of financial literacy education has been highlighted as an area in need of deeper examination.

The purpose of this research is to investigate the preparedness of teachers in teaching financial literacy (FL) in the state of North Carolina. The study addresses concerns on subject areas in which teachers need training, content of the financial literacy courses and the structure of incorporating financial literacy the school curricula. This study adds to the limited literature on teachers of financial education, the challenges and how policy could be designed to improve on teachers' knowledge and effectiveness in teaching financial literacy. Furthermore, this study provides information on North Carolina (NC) teachers' knowledge and experience in teaching FL. The study is based on an online survey of high school teachers in NC.

The main findings of the study indicate that most teachers reported financial education as an important program for high school students. Majority of the teachers indicated they felt prepared in teaching financial literacy. However we find that these teachers level of comfort in teaching various topics in the financial literacy content varied. The study also identified Continuing Education Units (CEU) as a major incentive that would encourage teachers to seek more training in financial literacy. Major policy implications of this study are (1) the need to provide high school teachers training in teaching financial literacy, (2) the importance of increasing teacher's awareness of the available financial literacy resources and (3) the importance of funding adequate financial literacy resources for classroom teachers.

Financial Literacy in High Schools

There are mixed results on the relevance of financial literacy in high school education. For example, the work by Bernheim, Garrett and Maki (2001) indicated that individuals who took a financial education course in high school tend to save a higher proportion of their income than those who did not. The study compared respondents from states that mandated financial education and those that did not. The authors, however, indicated that the impact is more of a long-term impact than short-term. In the same vein, Tennyson and Nguyen (2001) specifically addressed the effectiveness of school mandates regarding personal finance on knowledge levels. They state up-front that students who were mandated to take financial educational courses perform better than students who are not mandated to take any financial education course. This study was based on the Jump$tart studies. Using the same Jump$tart study, Mandell (2008) did not find any relationship between a semester course in financial education in high school and financial literacy. Other studies, (Cole 2010, Mandell and Klein 2009) have even found that students who took courses in financial education performed worse or showed no difference with those who had no financial education.

Notwithstanding the various arguments about financial education in high school, it is difficult to draw conclusions on the relationship without considering the teachers who transmit the financial education information. There are very few studies that have looked at the competence and preparedness of high school teachers in teaching financial education. Loibl (2010) reported that teachers are involved in information research when they have a high interest in the subject, which also contributes to continuous education. Another study that is closely related to our study is by Way and Holden (2009). The authors look at the preparedness of high school teachers in teaching financial education. Major findings from their study indicated that the majority of teachers who taught a high school financial education course were much unprepared to teach the course. This study is based on an analysis of high school teachers in the U.S. Though a high percentage of these teachers acknowledged the importance of financial education in high school, they felt incompetent in teaching various subject areas in financial education. Our study differs from previous studies because we focus teachers with respect to their challenges, educational preparation, teaching comfort levels and incentives for additional training and skills.

Study Methodology

This study is based on an online survey of K-12 teachers in all 100 counties in the eight main regions of North Carolina. This survey was administered in 2012.

The purpose of the survey was to collect information that will allow us to explore (i) the characteristics of school teachers in NC, (ii) the qualifications and experiences of these teachers in teaching financial literacy (iii) the ways in which financial literacy is taught in the State of North Carolina and (iv) the challenges faced by financial literacy teachers. Most of the questions were open ended and participants were given a list of options from which to choose their answers.

Descriptive Statistics

In total 321 teachers (260 females and 61 males) logged onto the survey and agreed to take part in the study. With respect to the participants age, 20 percent were over 55 years old, 18 percent were between the ages of 51-55 years, 17 percent were between the ages of 46 and 50 and 14 percent were between 41 and 45 years. The rest of the age ranges (under 26, 26-30, 31-35 and 36-40) were all less than 10 percent for each. Eighty-two percent of the respondents indicated that they were teaching grades 9-12. In terms of course preparation, 52% of the teachers were teaching less than three preparations per day. Forty-six percent indicated they were teaching between 3-5 preparations and about 1% reported teaching more than five preparations per day.

Characteristics of Teachers' Background and Qualifications

Nearly 38 percent of those who responded to the survey described their education background as business education, 22 percent of the respondents indicated family and consumer sciences while 14 percent indicated business administration. The smaller responding groups included mathematics (6%), economics (3%), elementary education (2.5%) and marketing (4%). Fifty-four percent reported a bachelor's degree as their highest level of education. Forty-two percent of the respondents had master's level degrees and 3% reported having a doctorate degree. A majority of the respondents, 34 percent, indicated that they had over 15 years of teaching experience, of this group 28 percent had never taught a class in personal finance and another 28 percent had taught a class in personal finance for less than 5 years, and 23 percent indicated that they had been teaching financial literature for more than 15 years. 24 percent had between 6-10 years of teaching experience, of these 43 percent had spent less than 5 years teaching personal finance and 33 percent had between 6-10 years teaching personal finance. Eighteen percent had 11-15 years teaching experience, 23 percent had between 1-5 years and less than 3 percent had less than a year teaching experience.

Teachers Perception of Relevance of Financial literacy at K-12 Level

Participants were asked to indicate their perception concerning how relevant it was for financial literacy to be taught at the K-12 level. The choices were very important, important and not so important. More than 80% indicated that it was very important for financial literacy to be taught at the K-12 level. We then compared years of teaching to relevance of financial literacy at the K-12 level. We found that irrespective of the years of teaching a majority of the respondents indicated that it was extremely important to teach financial literacy as part of the K-12 curriculum. Teachers' interest in teaching a course is affected by how important they view the relevance of the course. If teachers see this course as not important, then they will not put in much effort in preparation and in teaching of the class. This will be reflected in how the students perform in financial literacy tests.

Majority of the teachers who had been teaching financial literacy for about five years indicated that the course was important, however only 19% of these reported they felt very prepared to teach financial literacy concepts. This is crucial because although teachers may report that the course is important, if they feel unprepared to teach it then it could also affect how they teach it and what information they transmit to their students. Additionally, if teachers felt unprepared to teach the course it also meant they will have to spend more time looking for information and resources that would help them teach the course.

Teachers' Preparedness in Teaching Financial Education (FE)

The survey participants were asked to share their level of preparedness in teaching financial literacy. To acquire this information the participants were asked "how prepared are you in teaching financial literacy concepts?" the response options were "very prepared" "somewhat prepared" and "not prepared". As shown in figure 1, 50% of the survey respondents indicated that they were very prepared to teach financial literacy concepts. Of this percentage, 43 percent indicated that financial literacy should be taught as a standalone course, 31 percent indiacted that it should be integrated in a k-12 curriculum and the remaining 31 percent thought finnacial literacy should be taught in the middle school. Forty two precent of the respondents indicated that they were somewhat prepared to teach financial literature. Of this percentage, 34 percent thought it should be taught as a stand alone course, 44 percent indicated that it should be an integrated course and 22 percent wanted it taught in middle school.

The final 8 percent of respondents indicated that they were not prepared to teach fiacial literacy concepts. Majority of these respondents reported that finnacial literacy should be taught in the middle school and at k-12 level, just about 11 percent indicated that financial literacy should be taught as a stand alone.

The study then compared preparedness in teaching financial literacy and years of teaching financial literacy. The study finds that those who had been teaching financial literacy for a longer period were more likely to report that they were very prepared in teaching financial literacy concepts. It could be that these teachers had improved at teaching the program with experience and with learning from the job. The most prepared financial literacy teachers come from the following course content areas: business and business administration, economics, accounting, and mathematics.

Resources Accessibility and types in teaching financial literacy:

Participants were asked to indicate which resources were most readily available when teaching financial literacy. The most common resources that respondents indicated were available to financial literacy teachers were classroom computers (28%), internet access (19%), smart board (16%) and computer labs (14%). Mobile apps and guest speakers were the resources that respondents indicated were least available. In describing their experience in teaching financial literacy, most of the participants indictaed that teaching financial literacy within another Carrier and Technical Education (CTE) course (n=163) and teaching financial literacy concepts within a CTE course, Personal Finance (n=161) were the most common methods through which finnacial literacy concepts was taught.
Financial literacy involves various topics, this study also sought to understand the topics that teachers were most comfortable with when teaching financial literacy, these results are shown in Table 1. In each case over 90 percent of respondents indicated that they were very comfortable and comfortable in teaching purchase decision(97%), checking account (97%), budgets (97%) career planning (97%) money management (95%) saving methods (93%), banking (92%) and cost of living (91%). The respondents expressed several areas of financial literacy concepts where they were less than comfortable in teaching. These areas include the following: risk management, investment diversification and estate and will planning. This list will provide information relative to training for those teachers charged with the responsibility of teaching financial literacy concepts.

Challenges, Recommendations and Opportunities for Advancement in Teaching Financial Literacy

The surveyed respondents indicated that the main challenges they faced while teaching financial literacy were: lack of access to adequate resources (n=107), the lack of opportunities to increase financial literacy knowledge (n=100), and the lack of classroom instruction time (n = 90). Respondents indicated that the least challenge they faced was lack of adminstrative support (n=19). Respondents had to also choose from a list of possible choices what would help them to seek additional knowledge on financial literacy. Majority of respondents reported continuing education units CEUs (n=250), and advancing personal knowledge (n=199) as incentives that would encourage them to seek additional knowledge in financial literacy. Respondents had to indicate their prefeered choice of teaching mode suppose finnacial literacy was offered in a local university near them. The choices were “workshops”, “online classes”, “local university classes”, “seminars” and “webinars”. Online classes was the most preferred by most respondents (n=186) and this was followed by workshops (n=183), seminars (n=88) and webinars (n=76) followed though not very popular and the least popular method was taking local university classes (n=44).

Discussion and Implications

The demographic information revealed that over 82% of the teachers were female and 70% of these teachers were over 41 years of age. In terms of experience in teaching, about 30% of the teachers indicated they had been teaching for more than 15 years. This strongly suggests that there possibly could be a gender imbalance in high school teachers in the state with a majority being female. Also, it suggests that most of the teachers were over forty years of age, with many years of teaching experience. Teachers in North Carolina reported that teaching FE was of high relevance in the state. In general over 90 percent of the respondents indicated that they felt either very prepared or somewhat prepared in teaching financial literacy concepts. This was prevalent irrespective of their educational backgrounds and years of experience. This is good in that if teachers feel prepared to teach a course they most likely put in efforts to ensure that they provide the right information. Though these teachers indicated they were prepared to teach financial literacy concepts they also indicated that there were some challenges. The major challenges were (1) a lack of adequate resources, (2) few opportunities to increase their knowledge of financial literacy and (3) little training and exposure to new financial literacy software tools. If these challenges were solved his would lead to improved financial literacy curriculum and delivery.

Financial literacy covers a variety of different subject areas which makes it difficult for some teachers. The inability or unpreparedness of teachers to teach the course can have several effects on how the course is taught, what is taught as well as the impact the teachers could have on students, which could affect their learning. When teachers are not prepared and comfortable in the course they are teaching they will not be able to have much impact on the learning attitudes of the students. Another factor that contributed to teachers' unpreparedness in teaching financial literacy was teachers' knowledge of resources that were available. Many of the participants in this study were unaware of the vast amount of financial literacy resources.

Limitation of study

First, it is important to note that this survey was an online survey and respondents had a choice as to whether to take part in it or not. This means that the sample results may not be fully representative of all teachers in the state of North Carolina who teach financial literacy. The findings of this research provide information and practices of the teachers relative to their needs, resources, challenges, and incentives to increase knowledge and training in the area of financial literacy. Additionally this study was based on self- reported responses from respondents and this may affect the results of the study. Notwithstanding, the information derived from the survey does provides a beginning point for information regarding financial literacy and how it is taught in North Carolina.

Conclusions

Suiter and Mezaro (2005) stated that "Children throughout the K-12 grades, including children who differ in ability levels and socio-economic backgrounds, can learn worthwhile content in personal finance if their teachers use appropriate strategies and materials. Children's understanding of economics and personal finance develops through a series of levels or stages. Nothing about the subject matter makes personal finance inappropriate for study by children in the early grades. And postponing the study of personal finance is unwise for other reasons. First, children certainly acquire some ideas and information about personal finance information from non-school sources. Some of what children acquire in this way will be incorrect or misleading. The longer we wait to provide personal finance education, the more time teachers will spend correcting misinformation. Second, many students drop out of school before their senior year. If personal finance education is postponed until the senior year, these students—those who may be most in need of personal finance education—are deprived of receiving any."

The National Association of State Boards of Education (NASBE) issued *Who Will Own Our Children? The Report of the NASBE Commission on Financial and Investor Literacy* in 2006 (NCEE) to profile the state of our nation's schools with respect to personal financial literacy. NASBE's recommendations indicate directional goals for improvement at every educational level. These goals include the following recommendations:

- State boards of education must be fully informed about the status of financial literacy in their states.
- States should consider financial literacy and investor education as a basic feature of K-12 education.
- State boards should ensure that teachers and/or staff members teaching financial literacy concepts are adequately trained.
- States should fully utilize public/private partnerships.
- States should improve their capacity to evaluate financial literacy programs.
- States should include financial and investor education in their academic standards and ensure that assessments are aligned with the standards.
- State boards of education should cooperate with other states to develop a common assessment tool for financial and investor education.
- States should encourage the development of a National Assessment of Educational Progress (NAEP) framework for financial literacy.

Loibl (2010) addressed the teacher confidence issue for high school financial education programs in Ohio, identifying (1) academic content area concerns, that is, teacher confidence in the larger disciplines within which the topic of financial education is often addressed (i.e., math, social studies, economics, family and consumer science, and business education), (2) teacher strategies in gathering personal finance information, and (3) teacher knowledge about personal finance. Loibl's (2010) survey includes a short quiz on financial knowledge with which teachers from almost all disciplines struggled, indicating a need for training of financial education instructors. Although the respondents were comfortable with some areas in the course content for personal finance, it is obvious that they lacked confidence in certain areas thus implying the need for additional training, workshops and/or online courses.

The studies by Suiter and Mezaro (2005),The National Association of State Boards of Education (NASBE) issued *Who Will Own Our Children? The Report of the NASBE Commission on Financial and Investor Literacy* in 2006 (NCEE) and Loibl (2010) document the value and need for additional funding strategies to assist in the development of financial literacy teachers across the nation. Although our study revealed that many respondents in this research were not using the readily available resources available for teaching financial literacy, most of the teachers in our study recognized the importance of and impact of additional financial education resources for their schools. The study revealed that many teachers self-reported that they were comfortable in teaching financial literacy though they showed they were more comfortable in some topics than others. The participants felt least competent in the more technical topics, such as risk management and insurance, saving and investing, and financial responsibility and decision making.

These are worrisome findings; while teachers recognize the importance of financial education, they admit limitations in their preparedness and ability to teach personal finance topics. A majority of teachers in this study were open to further education in financial literacy. Interestingly, many of those who report an interest in additional training are those who have had a college course in personal finance or who have backgrounds in social studies. While the majority of teachers engage in a number of financial behaviors that typically help ensure financial security, they express the same financial concerns of the general population. In other words, not only do teachers in this study seem interested in engaging in training to teach financial literacy but they are also interested in the same training that may offer personal benefits.

References

Bernanke (2013) http://www.federalreserve.gov/newsevents/speech/20130404a.htm

Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving: The long-term effects of high school financial curriculum mandates. Journal of Public Economics, 80(3), 435–465.

Carswell, A. T. (2009). Does housing counseling change consumer financial behaviors? Evidence from Philadelphia. Journal of Family and Economic Issues, 30(4), 339-356.

Cole, S., and G.K. Shastry (2010) "Is High School the Right Time to Teach Savings Behavior? The Effect of Financial Education and Mathematics Courses on Savings," Harvard Business School/Wellesley College December

Collins, J. M. (2007). Exploring the design of financial counseling for mortgage borrowers in default. Journal of Family and Economic Issues, 28(2), 207-226

Garman, E. T., Kim, J., Kratzer. C. Y., Brunson, R. H. (1999). Workplace financial education improves personal financial wellness. Financial Counseling and Planning, 10, 79-88.

Garman, E. T., Leech, I. E., & Grable, J. E. (1996). The negative impact of employee poor personal financial behaviors on employers. Financial Counseling and Planning, 7, 157-168.

Haynes-Bordas, R., Kiss, D. E., & Yilmazer, T. (2008). Effectiveness of financial education on financial management behavior and account usage: Evidence from a “second chance” program. Journal of Family and Economic Issues, 29(3), 362-390.

Joo, S., & Grable, J. E. (2000). Improving employee productivity: The role of financial counseling and education. Journal of Employment Counseling, 37, 2-15.

Kim, J., & Garman, E. T. (2004). Financial stress, pay satisfaction, and workplace performance. Compensations and Benefits Review, 36(1), 69-76.

Loibl, C. (2010). A look inside: teacher information search for personal finance instruction. ijcs_ International Journal of Consumer Studies

Mandell L. (2008) Financial Literacy of High School Students J.J. Xiao, (ed.), Handbook of Consumer Finance Research, 163 Springer

Mandell L. and L Klein (2009). The Impact of Financial Literacy Education on Subsequent Financial Behavior. Journal of Financial Counseling and Planning, Vol. 20, No. 1,

National Council for Economic Education (2014) Economic and Personal Finance Education in Our Nation’s Schools 2014 http://www.councilforeconed.org/wp/wp-content/uploads/2014/02/2014-Survey-of-the-States.pdf

O’Connell, A. (2008). Evaluating the effectiveness of financial education programmes. OECD Journal: General Papers, 3, 9-51

OECD (2014) http://www.oecd.org/daf/fin/financial-education/financial-education-for-youth.htm

Scott, R. H., III. (2010). Credit card ownership among American high school seniors: 1997-2008. Journal of Family and Economic Issues, 31(2), 151-160.

Suiter.M. and B. Mezaros (2005).”Teaching about Saving and Investing in the Elementary and Middle School Grades.” Social Science Education 69 (2),92-95.

Tennyson, S. & C. Nguyen. 2001. “State Curriculum Mandates and Student Knowledge of Personal Finance,” Journal of Consumer Affairs. (Winter).

The National Association of state Boards of Education (NASBE) 2006, Who Will Own Our Children? The Report of the NASBE Commission on Financial and Investor Literacy.

Way W & Holden C. (2009) Outstanding AFCPE Conference Paper Teachers’ Background and Capacity to Teach Personal Finance: Results of a National Study**,** Journal of Financial Counseling and Planning Volume 20, Issue 2 2009

Walstad W.B., Rebeck K, & Macdonald R. A. (2010) The Effects Of Financial Education On The Financial Knowledge Of High School Students. The Journal of Consumer Affairs, Vol. 44, No. 2,

Van Rooij M, Lusardi A, & Alessie R. (2011) Financial literacy and stock market participation**.** Journal of Financial Economics Volume 101, Issue 2, Pages 449–472

Table 1:Teachers level of comfortability in teaching various topics in financial literacy course

Topic	**Completely comfortable**	**Comfortable**	**Less than comfortable**
banking	57	35	8
bankruptcy	29	43	28
budgets	68	28	3
career planning	66	30	3
charitable giving	44	45	11
checking account management	68	29	3
consumer fraud	44	35	21
cost of living	54	37	9
credit laws	27	42	30
credit rating	38	43	19
credit scores	41	40	19
debt control	53	33	14
estate and will planning	21	45	34
financial institutions	47	38	15
health and disability planning	29	41	31
income projection	46	36	18
inflation	36	41	23
insurance options	35	42	23
investment diversification	25	38	37
liability insurance	34	41	26
life insurance plans	31	43	26
money management	62	33	5
property management	34	41	25
purchase decisions	68	29	3
retirement management	28	47	25
risk management	28	42	30
saving methods	58	35	7
tax management	25	43	32

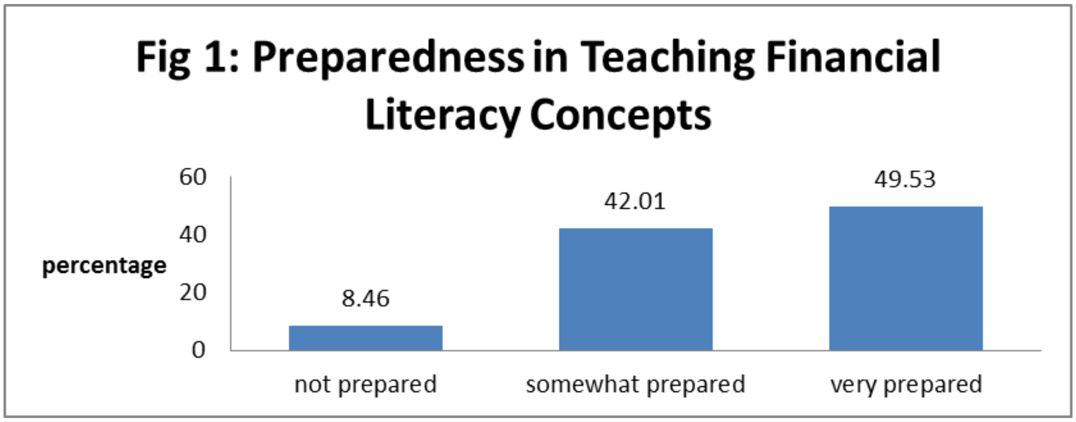
Fig 1: Preparedness in Teaching Financial Literacy Concepts
percentage
60
40
20
0
8.46
42.01
49.53
not prepared
somewhat prepared
very prepared

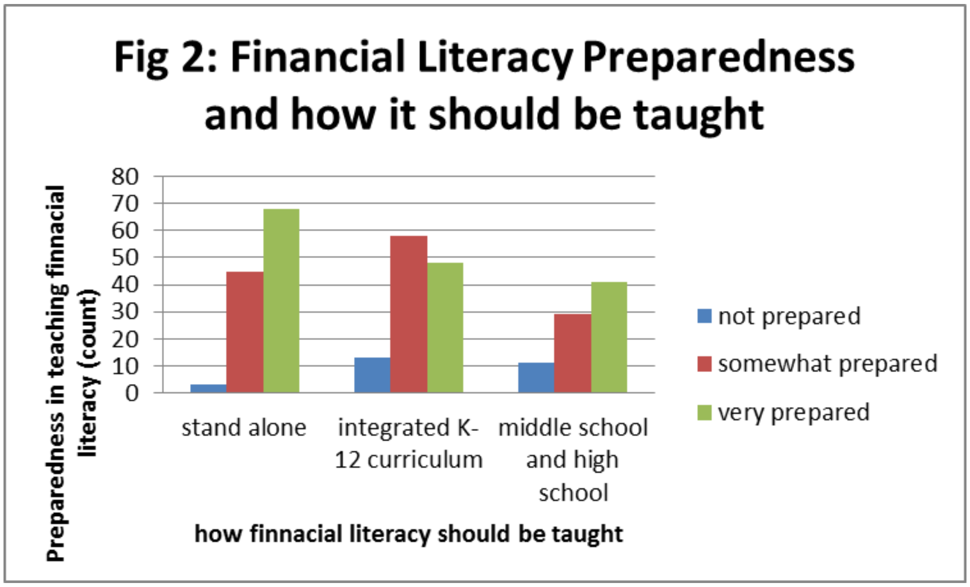
Fig 2: Financial Literacy Preparedness and how it should be taught
Preparedness in teaching finnacial literacy (count)
80
70
60
50
40
30
20
10
0
stand alone
integrated K-12 curriculum
middle school and high school
how finnacial literacy should be taught
not prepared
somewhat prepared
very prepared