

Financial Literacy in WCPSS

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Summary

In the spring of 2016 and 2017, a sample of juniors across all WCPSS high schools was administered a survey of financial literacy concepts as part of the College and Work Readiness Assessment (CWRA). The district administered this survey as education stakeholders have become increasingly interested in—and concerned about—the financial literacy of students who will soon enter college or the workforce.

Key findings:

- Roughly 23% of WCPSS' male students demonstrated high financial literacy compared with only 13% of females.
- Asian and White students exhibited rates of financial literacy roughly double those of their Black and Hispanic/Latino counterparts.
- Prior achievement in math and reading was strongly associated with high financial literacy. Students meeting grade-level or college-ready benchmarks demonstrated financial literacy rates 2-3 times higher than their lower-achieving counterparts.
- The factors most strongly predictive of whether a student had high financial literacy were Academically or Intellectually Gifted (AIG) status, being male, and meeting college/career readiness benchmarks in 8th grade math.

The results suggest that WCPSS should explore interventions that can help close gaps in financial literacy between male and female students and among racial/ethnic groups.



Introduction

The Wake County Public School System (WCPSS), through its *Vision 2020* strategic plan, aims to graduate at least 95% of its students ready for productive citizenship. One important feature of citizenship is the development of financial literacy (Davies, 2015), which has received renewed attention in the wake of the Great Recession of 2008.

At that time, to “expand and improve financial education for students from kindergarten through post-secondary education,” President George W. Bush established the nation’s first Advisory Council on Financial Literacy. This group included 16 members drawn from banks, credit unions, universities, and non-profits. The council’s activities were extended by President Barack Obama in 2010, but the group disbanded in 2013. In its wake, the Consumer Financial Protection Bureau (CFPB) has submitted its *Financial Literacy Annual Report* to Congress to describe “initiatives to educate and empower consumers to make better informed financial decisions.”

The economic crisis was not the only factor that motivated the creation of these federal advocacy groups. A decade prior, a wave of survey results among adolescents and adults demonstrated alarmingly low rates of financial literacy. The Jump\$tart Coalition for Personal Financial Literacy began documenting this phenomenon among high school seniors in the late 1990s (Davis & Durband, 2008). In a follow-up to the National Longitudinal Survey of Youth (NLSY97), researchers found that barely a quarter of young adults understood basic financial concepts (Lusardi, Mitchell, & Curto, 2010). More recently, the Organization for Economic Co-operation and Development (OECD), through its Program for International Student Assessment (PISA), administered its first battery of financial literacy skills questions

in 2012 and followed up in 2015. The most recent results (Figure 1) show that the United States closely trailed the OECD average, while North Carolina exceeded the U.S. and OECD averages by a slim margin. Other international work utilizing the Jump\$tart survey suggested that American students demonstrated higher levels of financial literacy than their Japanese counterparts (Chinen & Endo, 2014).

The results from more than a decade of surveys paint a mixed picture about the financial literacy levels of American students. The early Jump\$tart results alongside the NLSY97 follow-up survey are cause for alarm. Yet U.S. students—as well as those from North Carolina—appear to be keeping pace with the rest of the world. To shed more light on financial literacy in WCPSS, we report here on recent survey results from a short battery of financial literacy questions administered to a sample of the district’s 11th grade students.

Measuring Financial Literacy

In spring 2016, WCPSS began administering the College and Work Readiness Assessment (CWRA) to roughly 1,600 11th graders in about half of the district’s high schools. Approximately 2,000 additional juniors were assessed in the remaining high schools in spring 2017. The CWRA measures problem-solving, reasoning, and critical thinking skills through performance tasks and items that require scientific and quantitative reasoning, critical reading and evaluation, and critique of an argument. The district supplemented the CWRA with five financial literacy questions developed by Annamaria Lusardi and her colleagues for the national Health and Retirement Survey (HRS) and which appear in periodic financial literacy reports issued by the Financial Industry Regulatory Authority (FINRA) (Lusardi, 2015; Lusardi, Mitchell, & Curto, 2009).



The five questions specifically ask students about interest, inflation, bond prices, mortgages, and risk, and are commonly used in a range of financial literacy surveys. As such, their responses allow us to compare the literacy rates of WCPSS juniors to other populations. FINRA recently published the results of responses by more than 25,000 American adults aged 18-64 (Lusardi, 2015). While the average FINRA respondent is older than the average WCPSS 11th grader, viewing the district's results alongside FINRA's offers the opportunity to both benchmark current results and set expectations for how our juniors could respond as adults in the future.

Defining Financial Literacy

The phrase “financial literacy” can be defined in a number of ways. The Financial Literacy and Education Commission, a consortium of 23 federal agencies, considers citizens to be financially literate when they are “equipped with the information, knowledge, and skills to evaluate their options and identify those that best suit their [financial] needs and circumstances” (FLEC, 2016). According to the CFPB, the ability to “manage one’s financial life and make the financial decisions that will serve one’s life goals requires a combination of knowledge, skills, and action” constitutes “financial literacy.” To quantify financial literacy, FINRA considers students who correctly answer four out of its five survey questions to have a high level of financial literacy. We use FINRA’s definition in measuring overall financial literacy and across gender and racial/ethnic groups in WCPSS.

Results

Figures 2-5 show financial literacy results for WCPSS’ 11th graders who took the FINRA survey during the 2015-16 and 2016-17 school

years. In its 2015 report, FINRA found that just over one-third of American adults had high financial literacy. Figure 2 shows that among WCPSS juniors, nearly a fifth of 11th graders demonstrated high financial literacy. This rate was higher for males and lower for females. Figure 3 shows that gender gaps persisted across the five grade 8 math End-of-Grade (EOG) Achievement Levels. The existence of a gender gap is consistent with previously reported findings by FINRA (2015).

In addition to the large gender gap, there existed large financial literacy gaps by race/ethnicity. Figure 4 shows that while nearly a quarter of White students and just over a fifth of Asian students met the high financial literacy benchmark, only 10-11% of Black and Hispanic/Latino students did so. These gaps also mirror those reported by FINRA (2015) and elsewhere (Lusardi, Mitchell, & Curto, 2010; Mandell, 2008).

The percentage of WCPSS’ 11th grade students meeting financial literacy benchmarks varied considerably by prior achievement in both math and reading. Students who are College and Career Ready (CCR) score a Level 4 or 5 on the EOG Test. Figure 5 shows that 11th graders’ prior achievement on EOG tests—as far back as 5th and 8th grade—was strongly associated with financial literacy rates. In both math and reading, students who were CCR outperformed their non-CCR peers by 9-15 percentage points. These gaps were similar to those between Grade Level Proficient (GPL; Level 3 or higher) students and their non-GPL counterparts.

Figures 2-5 suggest that in WCPSS, gender, race/ethnicity, and prior achievement are all individually associated with high financial literacy. When we consider a multitude of factors simultaneously, three most strongly predict high financial literacy rates. Students with AIG status, male students, and those



meeting CCR benchmarks in 8th grade math were significantly more likely to have high levels of financial literacy.

Conclusions

The 2015 PISA results represented a watershed moment in our awareness of financial literacy in the United States. Not only did the 2015 PISA report compare financial literacy of American students to peers across the globe, but for the first time, it included the results from two U.S. states—one of which was North Carolina. As the global economy becomes more integrated, education stakeholders will ask not only how the states compare to international counterparts, but how school districts compare to one another.

It's too early to tell how well financial literacy rates in WCPSS compare to peer districts across the country (not having access to financial literacy data of other districts prevents us from doing a peer comparison). What we do know is that gaps based on gender and race/ethnicity mirror those that appear in survey responses of American adults. We also know that prior achievement is strongly associated with financial literacy. Perhaps most worrying is the fact that we can currently predict whether a student will be financially literate on the basis of gifted status, gender, and prior math achievement. To help change this, the district should identify and pilot interventions that introduce as many students as possible—as early as possible—to knowledge, skills, and activities that foster strong financial literacy.

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Figure 1
Performance in Financial Literacy, PISA 2015

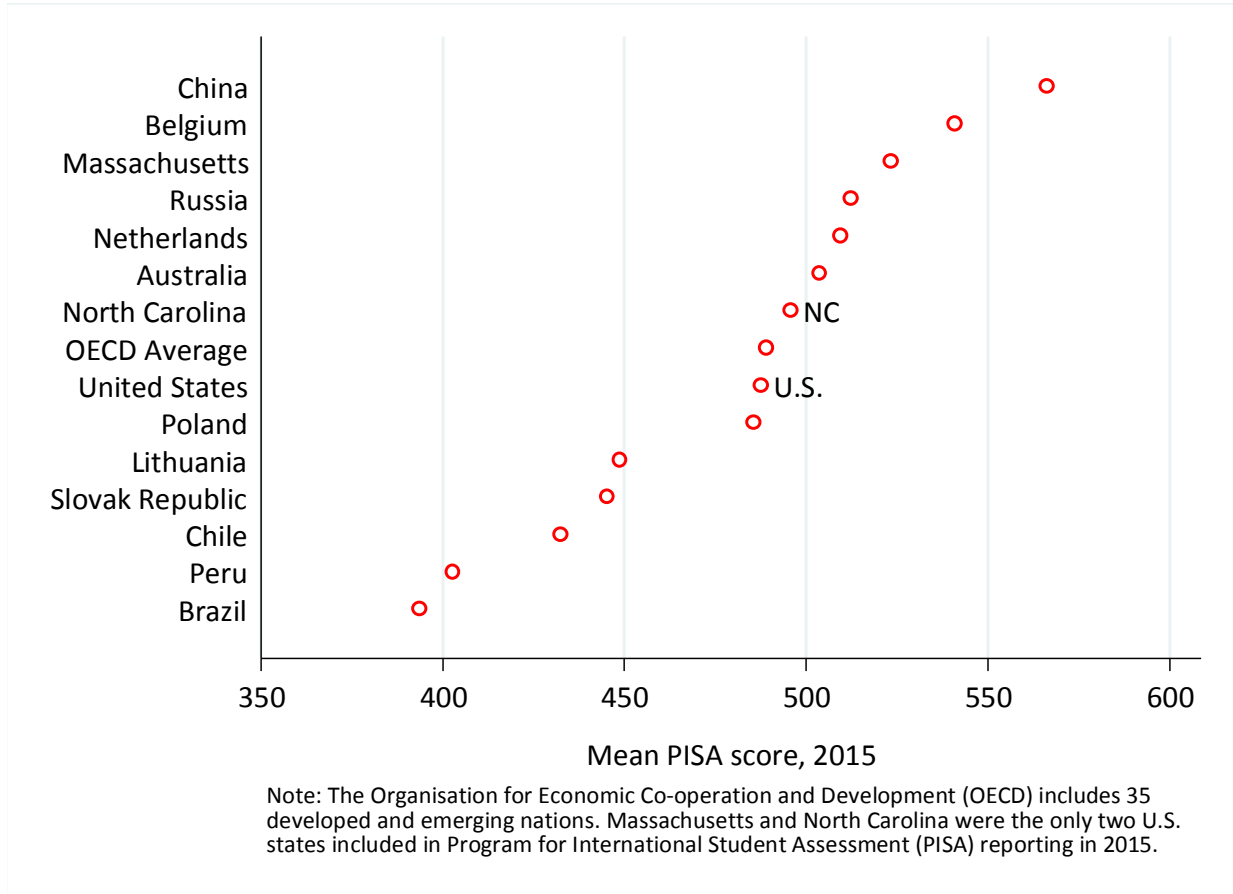


Figure 2
Financial Literacy Rates for WCPSS' 11th Graders, by Gender

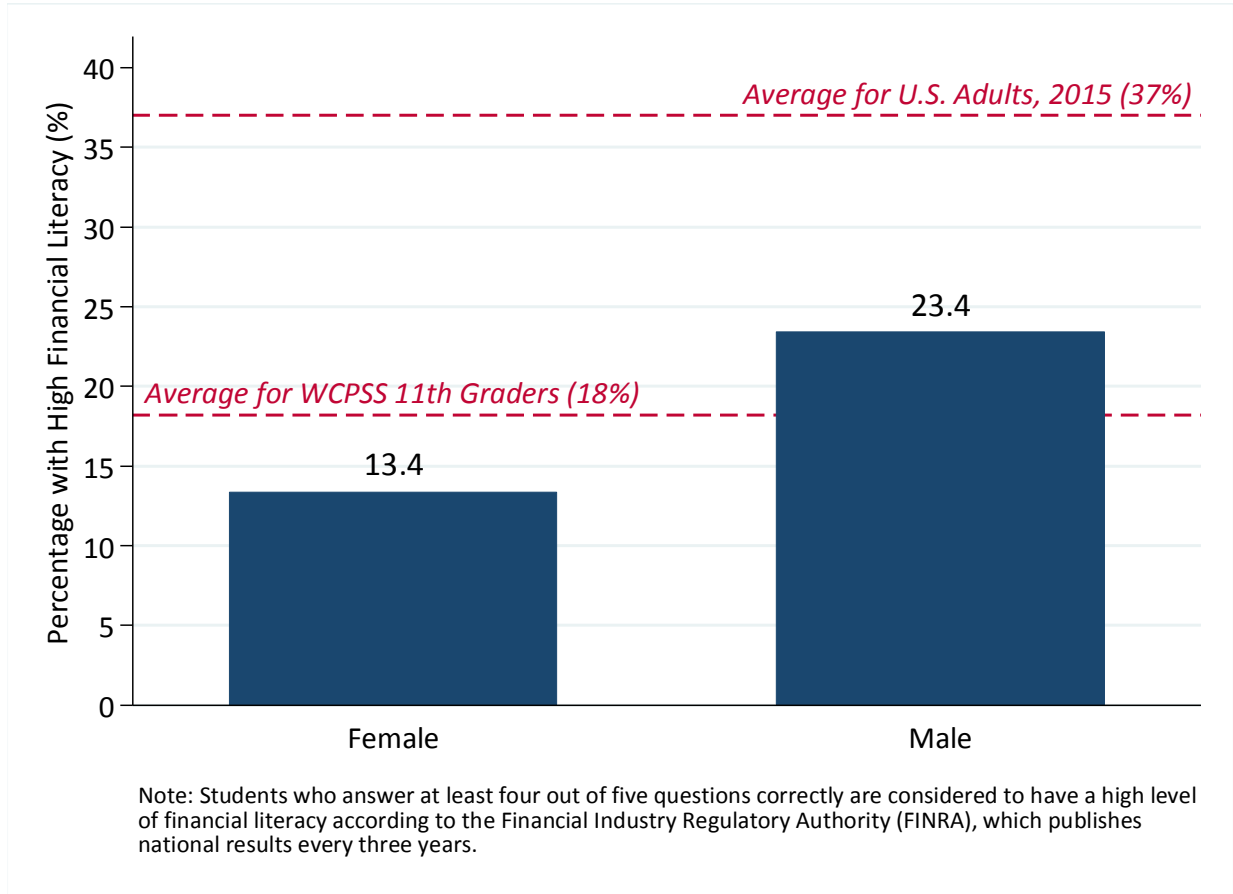


Figure 3
Financial Literacy Rates for WCPSS' 11th Graders,
by Gender and Grade 8 EOG Math Achievement Level

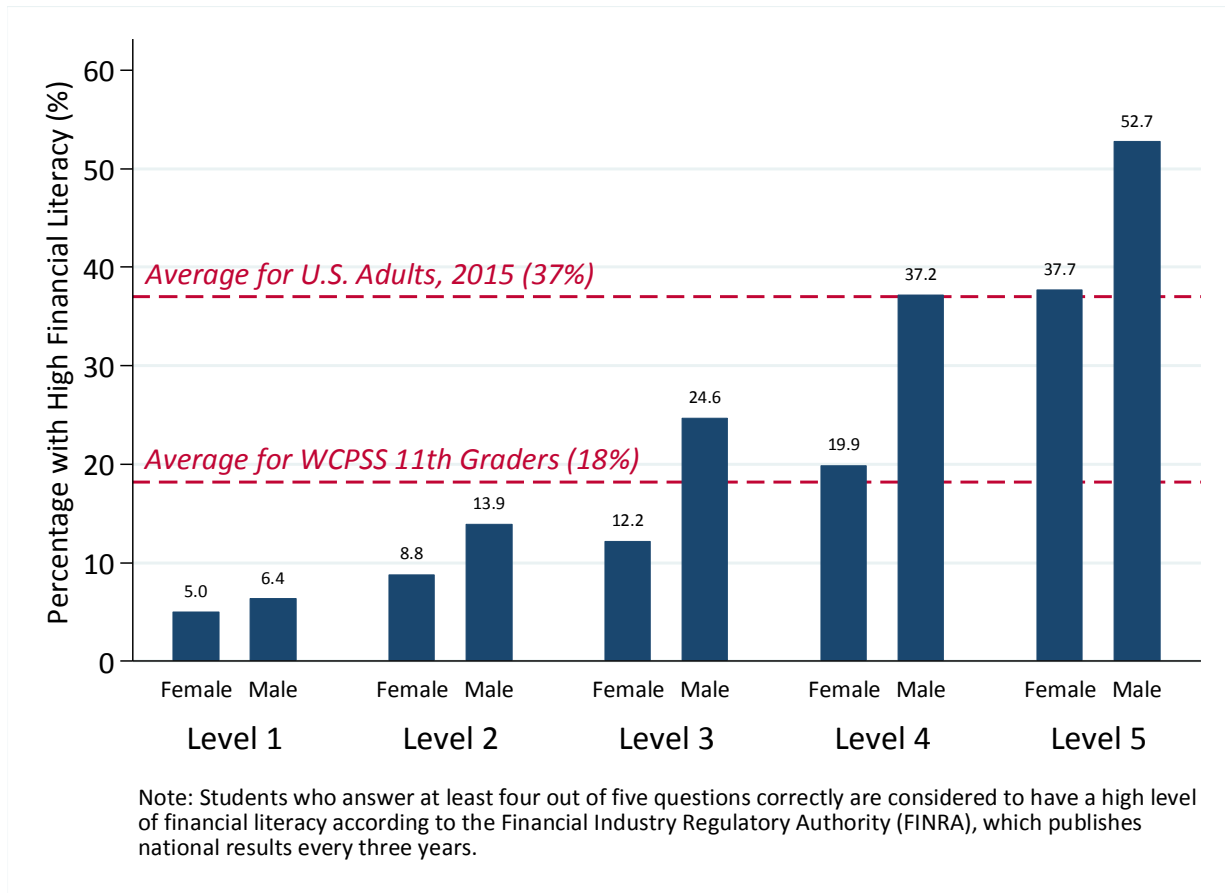


Figure 4
Financial Literacy Rates for WCPSS' 11th Graders, by Race/Ethnicity

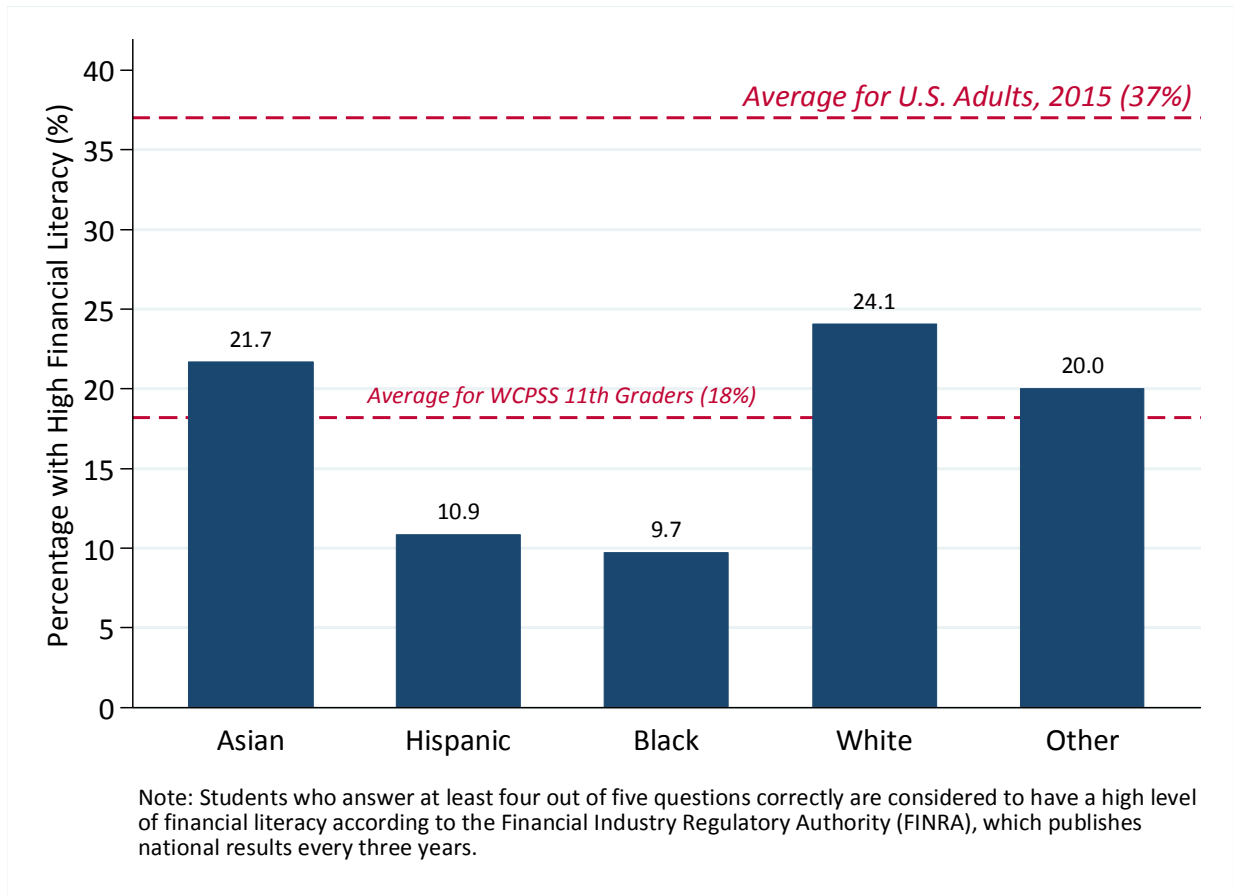


Figure 5
Financial Literacy Rates (%), by Prior College & Career Ready (CCR) Achievement

