Establishing Equity, Engagement and Enrichment in the United States Education System

Andrea Alas, Sadia Barua, and Julia Jamieson

Bright Minds, Fresh Ideas Think Tank, a NAF Future Ready Lab

Virtual Summer Internship

Powered by FPP

July 27, 2020
Establishing Equity, Engagement and Enrichment in the Education System of the U.S.

Abstract

The purpose of this research paper is to recognize the current shortcomings of the education system in the United States. Students in the U.S. spend a significant amount of time in school hence the system ends up having a major impact on students' learning and life experiences. The main flaws in the system are the inequity of school funding, ineffectiveness of standardized testing, and insignificance of current financial literacy education. The research team recognized systemic changes necessary to establish financial capability in students. Inequality in funding for schools within the same areas can indicate unequal opportunities for all students. Furthermore, the team found standardized testing compels students to practice rote memorization and decreases teacher creativity, thus hindering students’ intellectual and professional growth. Lastly, the absence of adequate financial literacy education later impacts the financial capability of students as they aren’t well equipped with the financial knowledge to feel financially secure. The authors propose to alleviate funding disparities by establishing a progressive property tax to distribute the money to under-funded schools. To effectively assess students, the team proposes to have portfolio or performance-based assessments in place of standardized tests to measure students’ comprehension and intellectual growth holistically. Lastly, for financial literacy education, the authors propose an integration of a financial literacy thematic unit into the education standards, while also offering mini-society simulation to foster empirical learning and an understanding of the real-life implications of financial literacy.

Keywords: financial capability, school funding, funding disparities, progressive tax, standardized testing, performance-based assessments, financial literacy, thematic unit
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

Overview of the Main Shortcomings of the U.S. Education System

The current school system of the United States of America inadequately prepares students for their future as professionals with an absence of effective and equal instruction that instills financial and professional preparedness. Students who attend schools in low-income communities tend to be the ones most hindered in their educational quality because their schools tend to be less funded in comparison to schools situated in high-income neighborhoods. The weight of high-stakes standardized tests has led to students studying for the tests rather than obtaining knowledge. Resultingly, standardized testing systems have affected current and past students by reducing individuals’ educational quality and comprehension of instructional concepts. Furthermore, most programs or classes aimed at improving financial literacy, if any are available to students, were not impactful in improving both their financial literacy or financial capability. Hence, the education system of the United States must be reformed at the systemic level to effectively prepare students for their future financial capability. The three main flaws that must be reformed are school funding, student assessments, and education for financial literacy.

Subarea #1: Equitable Funding for Public Education

Disparities between School Funding

The tenth amendment of the Constitution of the United States declares that “the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people” (US Constitution, n.d.). Hence, the U.S. government is constructed so that much power is also given to the states to delegate specific issues. One of these issues is the funding and management of schools. The federal government only funds about 12% while “[S]tates contribute 44% of total education funding in the United
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

States,” (American University, 2019) demonstrating that a large majority of funding is delegated by the states. If compared globally, the Netherlands school system is funded mainly by the national government while in the U.S., 12.7% of funding comes from federal, 43.5% from state, and other 43.8% from local funds which further shows the responsibility given to the state and local governments due to the constitutional rights of the states previously mentioned (Owings, et al., 2015). However, this funding of schools through their respective states has caused disparities.

The disparity is among the funding of schools within the high-income and low-income neighborhoods. Schools in richer neighborhoods are often better funded than the ones in poorer neighborhoods. “A recent OECD report found that though the United States is not unique in its population of poor or immigrant students, it is one of only three developed countries that invest less in high needs schools than in well-off schools.” (Klein, et al., 2012). The disparity in funding is a significant problem because many times worse funding leads to fewer opportunities offered by schools.

Local Tax for School Funding

The vast majority of school funding specifically comes from local tax. As Rebecca Sibilia, founder and CEO of EdBuild, an organization that tries to bring fairness to school funding, explains “a school district's resources often come down to how wealthy an area is and how much residents pay in taxes...We have built a school funding system that is reliant on geography, and therefore the school funding system has inherited all of the historical ills of where we have forced and incentivized people to live,” (Lombardo, 2019). Public schools in the U.S. are viewed as institutions that serve their local communities. By the end of the 19th century, funding public schools through local property tax became widespread and almost the norm. The funding through the local community was useful at the time since many families were living in
small, relatively isolated communities. But as people moved to cities and suburbs, they still retained the practice of funding through local tax. This is because parents in affluent suburbs were generally willing to fund more for the school for their own children, but due to familiarity with local tax funding, they saw little to no reason to pay “additional taxes to fund equivalent schools for the impoverished students left behind in city centers or rural towns” (Biddle & Berliner, 2002). This shows how once there was a necessity in having local tax pay for schools however that had its negative effects as affluent and poorer neighborhoods started forming separately.

**Problems and Issues with Local Tax Funding**

Since funding is left to the states to delegate locally, there are many differences between how well each state funds its schools and distributes funding. Many states are able to distribute their funding well or have higher levels of funding, to begin with, whereas some don’t. For example, a study by School Funding Fairness, an organization that reports on fairness of funding in public schools, measured funding level, funding distribution, and many other factors. The funding level showed how each state did in per-pupil funding which means how much money is spent on each pupil on average in a school, while funding distribution showed if a state provides more funding based on the school’s poverty level. The results showed that only 2 states, New Jersey and Wyoming, scored well in the two categories. South Carolina, Vermont, and West Virginia scored well in Funding Level but poorly on Funding Distribution. “Arizona, Nevada, South Dakota, Texas, California, Florida, Louisiana, and Tennessee [scored poorly on both] (Baker, et al., 2018). “Colorado, North Carolina, and Utah have somewhat progressive funding systems, but low funding levels” (Baker, et al., 2018). Additionally, since this study was done in 2018, it furthers the point that this issue of funding disparity is still ongoing and very critical.
However, these disparities were not accepted by communities and did not go unnoticed. For example, in a 2015 PDK/Gallup poll, when asked about the public’s attitude toward public schools, the American public regarded the lack of sufficient school funding as the biggest issue facing their local public schools (Underwood, 2015). Furthermore, many lawsuits had taken place hoping for better distribution of funding across states. In the 1970s and 1980s, the citizens of many states sued their states claiming that on the rationale that the state’s resources were not distributed equitably across public school districts or schools (Underwood, 2015). A specific example was the case of *San Antonio Independent School District v. Rodriguez*. In 1973, Rodriguez challenged the funding scheme where local tax paid for supplemental revenue in schools in Texas by arguing that students in underprivileged neighborhoods will not get that supplemental revenue as their families cannot pay for that. The Supreme Court denied the case of inequitable funding by a 5-4 vote, ruling that the U.S. Constitution does not require equitable funding in schools.

Although not a requirement in the U.S. Constitution, it is questionable that there is not already a rule for states to have equitable funding in schools. The ideals of the U.S. education system is to give equal access to education and opportunities to everyone. The U.S. Constitution and ideals of this country advocates for and takes pride in its democracy and equality for all; therefore, the U.S. government must place emphasis on equality for school funding especially since it can have significant implications on the youth. The implication of equal school funding is equal opportunities for students from diverse backgrounds. This greater education quality for all can create a more constructive and productive society.

However, it is not to say the federal government does not do anything to help the lower-income students. The federal government spends ED, education funding, to improve the
academic achievement of children in high-poverty schools. However, when given the federal ED to school “[d]istricts tend to spend ED funds on the same things from year to year because it feels safe…Change means taking a risk that the new spending will be found to be unallowable, which has consequences for districts” (Junge, 2019). If any change does not follow guidelines then the school may not have access to the ED fund at all. The strict federal guidelines as to how funds can be spent make it harder for schools to find new solutions to be proposed for specific problems in schools. Additionally, the federal ED rule is that the fund given must add to and not replace the fund of the states, meaning the federal funds are a supplement and have a preference for supplemental activities rather than Core (Junge, 2019). This repeatedly leaves states on their own to solve the issue of funding which leads them to rely on local tax and perpetuate the cycle of disparities in funding that in result, affects the students that are already at a disadvantage negatively.

Implications of Lower Funds on Students

The concern for inequitable funding does not only stem from the fact that it infringes equality of America’s students, but also from the fact that this funding problem has a direct effect on the students’ futures. Students from wealthy communities attend a public school with funding of $15,000 or more per student per year, whereas students from poorer communities receive less than $4,000 per student per year (Biddle & Berliner, 2002). With less funding in low-income areas, students have fewer enrichment opportunities than a student in a higher funded school. One example of this is the problem with infrastructure where many schools in the U.S. experience infrastructure problems. There have been many efforts to modernize infrastructure. However, with less funding in lower-income area schools, they cannot fund the schools for infrastructure as well and those schools' students experience more negative impacts
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

One study found that in schools without air conditioning, “a 1°F hotter school year reduces that year’s learning by one percent. for every one Fahrenheit” (Goodman et al., 2018).

The problem with infrastructure is only the tip of the iceberg for the negative effects. The Learning Policy Institute’s, an organization that tries to improve educational policies, president Darling-Hammond says that lower funding “translates to less experienced teachers, larger classes, and, ultimately, lower graduation rates and lower achievement levels,” (Barrett, 2018).

Specifically, better-funded school districts attract teachers with higher levels of education and more experience who in turn generate better achievement scores among students (Biddle & Berliner, 2002). Along with problems in attracting teachers, insufficiently funded schools are more likely to have classes with high numbers of new students, which can cause greater disruptions in the instruction of subjects and impel other students in the class to fall behind (Dodge, 2018). Hence, the many negative effects of poor funding, including fewer teachers, larger class sizes, and lower achievement levels, can be improved as a result of reformed funding.

All of these factors affect the financial capability of students either during or after their public schooling. As students in richer neighborhoods schools have more opportunities for different enrichment activities and educational programs, they can gain an upper hand in employment and pay competitiveness later in life. On the other hand, poorly funded school students sometimes do not finish high school, putting them at a disadvantage. For example, in “2009, poor (bottom 20% of all family incomes) students were five times more likely to drop out of high school than high-income (top 20% of all family incomes) students” (Rumberger, 2013). This is significant because public schools in the U.S. are free so it is not the problem of students
coming from poverty but the opportunities students receive in school. Poorly funded schools reduce the opportunities students in high poverty have to improve themselves.

One may say that school funding might not have any effect on how students perform or not, however, there are clear correlations and evidence. Many studies indicate that, in fact, increasing funding can make those negative effects of poorly funded schools discussed into a positive drive for students’ achievements. For example, a “21.7% increase in per-pupil spending throughout all 12 school-age years for children from low-income families is large enough to eliminate the education attainment gap between children from low-income and non-poor families” (Barrett, 2018). Even a little improvement in funding helps decrease dropout rates and increase the number of low-income students who get a higher quality education which sets them up for pursuing higher education in the future.

Furthermore, specifically an article by Chalkbeat Organization, an organization that advocates for improvement in education for historically underprivileged groups, in 2018 referenced a study where 13 research in many states across the U.S. were reviewed to see the effect of better funding. The study “found that more money consistently meant better outcomes for students — higher test scores, higher graduation rates, and sometimes even higher wages as adults” (Barnum, 2019). Furthermore, Chalkbeat Organization explained 4 studies where efforts were made to improve funding distribution in lower-income schools and the results were astonishing. One study showed “[a]n extra $1,000 in per-pupil spending raised test scores...dropout rates fell 2 percent...college enrollment [increased by 9 %, and college graduation rates increased 4 percent (Barnum, 2019). In another study, “[m]oney from the bond election was spent on school facilities improvements and construction” which caused “school districts that served largely low-income students had higher test scores as a result” (Barnum,
2019). There is a clear connection between the amount of funding a school receives and the future of its students. Better funding in education can foster a much better education for students in hopes of leading that student to have a better life.

**Implementing Progressive Property Tax for School Funding**

The solution we propose stems from the idea of historically funding through local property tax. We propose to fix the inequality of funding between schools by asking a county or a given area to recognize if there are discrepancies between the funding of schools. We are hoping to start at the local level because the issue is that between local schools some do not have equal funding, and it has to be “make sure districts are in a range of each other…to begin to close that gap” of inequality, as says John Cárdenas (2020), a Financial Coach at Center for Financial Stability. Starting locally is important to focus on community issues and find specific funding issues. Hence, looking first at funding locally, at the county, and then the district can be made mandatory through the state government passing a law or act requiring the recognition of funding discrepancies. Next, the counties can recognize discrepancies by looking at each school’s funding within that area and comparing it to each other while also taking into account the graduation and retention rates along with test achievements of students in the schools. If there are discrepancies in funding, then they will be funded through local tax.

The local tax that we are targeting specifically is property tax. We want a more progressive property tax code to be implemented. The state would have the responsibility to look into the counties with discrepancies and put a progressive tax code in those areas. The progressive property tax code will tax wealthier households more based on their property value and that in turn would help to balance out the modest tax from low-income family’s property. In our proposal, the percent of one's property value, which will be paid as property tax annually,
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

will gradually increase based upon the taxable value of the property. The wealthier families will end up paying more because their property is worth more. The reason for this is because most schools funded through local taxes, specifically are funded by property taxes, “meaning that wealthier communities have more to spend” for their children’s school (Strauss, 2019). Furthermore, property taxes in the U.S. are regressive. With a regressive tax, the poor pay a large portion of their income for tax, unlike higher-income families. This is shown when households with lower incomes have to spend a larger section of their incomes on rent. Unfortunately, for the poorest households, housing costs can consume more than half of their income, whereas households with higher incomes “tend to spend less than 20% of their incomes on housing” (Erdmann, 2019). Hence, by taxing wealthy citizens and corporations their due, we predict local and federal governments could afford to improve the public education system itself which includes the funding disparities (American University, 2019). Hence, by conglomerating the taxes received, we can fund schools that need more funding.

Florida’s Seminole County School Board Member, Tina Calderone (2020) said “I wish for equitable funding” and “we must balance the budget” when asked about changing a few things in the current education system. This indicates there is a want for change in funding discrepancies even in the school board officials themselves. They want to put the fund into the right activities in school while also balancing out the budget for lower funded schools. The reform in funding is crucial for the American education system because “[o]ur nation’s economy depends on a well-educated, high-quality workforce and that means investing in all students,” says Darling-Hammond. Clearly showing that investing with good funding for all students will result in a passionate future generation who will be the ones leading the country. “Investments in these students are investments in their future and ours. If we don’t ensure they have the quality
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

schools that their wealthier peers have, we deny far too many of them the opportunity to succeed and to contribute to society” (Barrett, 2018). Investing in their education by giving them equal opportunity will create a high-quality workforce in many different areas of life.

Furthermore, this investment in education will pay off as in 2008, economists found that “investing in education has an impact on the country’s overall economic health by increasing the gross domestic product (GDP)” (American University, 2019) which further gives specific predictions of economic output as a result of investment in proper equally funded student education. The equal access to opportunities such as educational programs and facilities through better funding can foster a better environment of learning for students, who in the future would lead the country economically and socially. Jhuma Nath (2020), Director, Corporate Systems Group at Verizon, adds that “if [students] are not taught well, you don’t know what [kind of] society [students] are going to get” hinting at the broad impact of this overlooked issue in the near future. That implies that not only does the student’s current life in schools depend on good funding but also does their future as individuals in society.

Ultimately, the problem of inequality in school funding not only becomes a problem of students who are in those lower funded schools but the whole country’s. Nath (2020) believes improvement in funding “is critical for human prosperity, there is a price to pay if students are not taught well.” That price being of our human morals and ethics for the democracy we preach. By morality we mean what is right and wrong and in this situation, it is of inequality in funding. Knowing that there are students not receiving equal opportunities in educational growth and opportunities for something they are not responsible for; it is our responsibility as empathetic people and of our good citizenry to solve that problem. More importantly, the United States’ societal ideals value equality in opportunity for all to build their own selves which in turn aid in
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

building the nation. Hence, with equity in funding, the education system of the U.S. can emphasize the importance of equality within our society to attain equal opportunities to further and make ourselves capable socially, psychologically and most importantly financially.

Subarea #2: Standardization of Public School Education and Assessment

Federal Standards- No Child Left Behind

In 2001, the United States Congress passed the No Child Left Behind (NCLB) Act and substantially shifted the way schools were assessed (National Education Association, 2019). States were now required to test their students annually to determine the quality of education students were receiving and subsequently determine the extent to which federal funding institutions can or should receive. Prior to the No Child Left Behind Act, 19 states tested their students annually (Ross et al., 2014). After the act was passed, all 50 states conformed to yearly standardized assessments from 3rd to 8th grade and one assessment in high school (Ross et al., 2014). Standardized testing was adopted by the states through NCLB to evade the penalty of losing federal funding (Ross et al., 2014). The sudden increase in the utilization of standardized testing to assess the ability of students rapidly shifted the rating of schools, and subsequently the funding and reputation the institutions earned, based upon the efforts of students on the day of the assessment. Students’ knowledge base and quality of instruction from an entire year were condensed into multiple-choice assessments designed for the masses.

In 2011, 80% of the United States’ schools were failing based upon the criteria of the No Child Left Behind Act (Frykholm, 2011). Many educators described the legislature as reducing curriculum to instructing the rote memorization of facts and demoralizing teaching staff and faculty due to the harsh school ratings of NCLB, senior journal editor Amy Frykholm (2011) reports these accounts while describing the viability of community-oriented schools. If all but
20% of U.S. schools were insufficient in teaching the American youth, were the schools or tests insufficient in measuring the learning quality of the students? Not all students learn via the same methods and neither can their abilities be quantified in an assessment distributed to all students. Forty million children were enrolled in grade, middle, or high school in 2011 according to the United States census (Davis & Bauman, 2013), but yet a national assessment declared the quality of their individual learning. A single assessment measured by a set level of competency cannot illustrate the growth and experience of a student, especially for students in lower-quality schools who may be experiencing significant—though still below average—growth. The teaching staff working extensively to establish knowledge and preparedness in their students can be entirely overlooked when evaluated in numerical means, depending on if the impact they had on their students was quantifiable or conceptual.

No Child Left Behind facilitated a counterproductive educational system for students’ achievement, as noted by many professionals in the field of education. Diane Ravitch (Hanson, 2012), a historian at New York University specialized in education, criticized the environment established in public schools due to NCLB. Ravitch notes the limited skills the standardized test system assesses and the systematic intent to have half of all students tested fall below the required level of competency in NCLB (Hanson, 2012). The tests institute limited principles of assessment and leave many institutions behind if not conforming to instructional methods which directly cultivate the NCLB testing standards. The No Child Left Behind Act sought to bring equal opportunity to students, but in fact, highlighted a narrow number of skills in students defined as the necessary attributes for educational comprehension and success.

Furthermore, Ravitch notes that NCLB directs schools from investing time in the skills which create “good citizens” and the arts (Hanson, 2012). Standardized testing under NCLB
assessed mathematical and reading skills amongst students while omitting assessment criteria for any other subject. Although other subjects significant to students’ success were not constricted under test-conforming instruction, these subjects were subsequently judged to be less valuable by many schools due to the lack of monetary incentivization. Students are left with fewer opportunities to develop communication skills or emotional intelligence when instructed in the fast-paced, logic-based skeleton of standardized curriculum, despite these skills’ vitality in a collaborative setting and society as a whole. Additionally, when schools experience budget cuts, the arts are the first to suffer because they offer no tangible strength to a school in the context of standardized testing. The NCLB Act led to a rerouting of funds dedicated to supplies for the arts, and the later Common Core Standards Act (CSS Act) emphasized core subjects at an even greater intensity (McDonald, 2016). In centering upon narrow aspects of a students’ learning progress, the future artists and all contributors to society are disadvantaged without access to resources to refine their character, develop their talents, and cultivate their creativity.

**Every Student Succeeds Act and Common Core State Standards**

The Obama administration began to allow states leeway in meeting the No Child Left Behind Act standards and, by 2015, the administration passed Every Student Succeeds Act, granting states greater control over their individual education systems (U.S. Department of Education, n.d.). Following the controversy of NCLB, the Obama administration reformed federal expectations, but in their wake, states had to adopt a new set of educational standards. The Obama Administration’s Race to the Top (RTTT) program required states to adopt the Common Core States Standards (CCSS) only two months after the standards’ publication in order to receive RTTT federal funding (Levitt, 2017). Roberta Levitt (2017), an educator with a doctorate of literacy, criticized the brevity of the approval window. In the cases of both the No
Child Left Behind Act and Common Core State Standards, the federal government spurred the measures to be adopted with the manipulation of federal funding. Despite a narrow window to discuss the full implications of the Common Core State Standards, initially, 45 states adopted the standards. By 2020, nine states have chosen to follow their own statewide standards (Common Core State Standards Initiative, 2020) as a movement from the standards they were federally compelled to assume.

However, the Common Core State Standards still structure 82% of the United States’ education system and standardized tests remain as the primary medium to rate schools. The testing standards have received backlash just as NCLB had, following instances such as the 2015 and 2017 national testing results, where math performance in fourth and eighth graders declined, disproportionately affecting the bottom quartile of students, while reading scores stayed stagnant (McCluskey et al., 2018). Neal McCluskey (2018), the Cato Institute’s Center for Educational Freedom’s director, led a study assessing national test scores over the past decades and observed the changes in student performance through comparing the assessment of students before and after the federal promotion of centralized instruction. Despite test scores rising for students nationally for multiple decades, the national standardization of curriculum and assessment displayed a decrease in student scores magnified in the case of lower-performing students (McCluskey et al., 2018). The Common Core State Standards have demonstrated no quantifiable improvement in students’ learning or future preparedness. Instead, the curriculum guides students down a narrow path of academic instruction with a heavy emphasis on math and reading due to the subjects’ significance in testing performance. Depending on one’s future career, the arts, sciences, or professional skills may be key to later success, but these fields of knowledge can be absent in a student’s learning due to funding cuts and national conformity.
Professors from the University of British Columbia focused upon the United States education system, Ross Wayne, Sandra Mathison, and Kevin Vinson (2014), discussed the true impact of CCSS, noting that no independent data has found the Common Core State Standards prepare students for college, improve the economy, establish modern skills, or reach any other factors supporting the lasting preparedness the Common Core claims to instill. The majority of the United States’ education system abides by the structure of the Common Core State Standards, but yet students’ skills remain stagnant in the context of standardized test performance and life preparedness. If professional skills are not instilled in students during the foundational base of their schooling, American society as a whole will be underdeveloped and unable to fully flourish in the rising competitiveness of the global economy.

Despite high-stakes testing’s focus on math and reading comprehension, Harvard professor Daniel Koretz reported that “no appreciable gains in either reading or high-school mathematics — even though reading and mathematics” (Rodberg, 2019) regarding student performance in a national data analysis. The current methods of student education through test-based accountability are inadequate in developing students' success and only perpetuate the current disparities in student comprehension. The education system should foster conceptual and intellectual growth for the youth of the United States, but students are reduced to the data which defines their learning success. High-stakes testing has repeatedly failed to enhance the education of students. With attempts by the No Child Left Behind Act, Common Core State Standards, and independent state standards to nationally streamline student learning through consistency in evaluation, the only progress when held to rigorous test-based measures is the progressive loss of educational quality, as seen in a decrease of diverse educational opportunities and stagnancy in subject-based competencies.
Teaching to the Test

Due to school ratings determined by student test scores, such as the Common Core’s “Annual Professional Performance Review,” a transformation of instruction has occurred in the classroom within the last two decades, where teachers no longer have the freedom to choose what or how they will teach when assessed based on the standards their students should reach on paper (Levitt, 2017). Teachers have felt compelled to teach for a high-stakes test in light of the federal accountability system, in which schools can be closed if not sufficiently testing to the instituted standards, and the manner of teaching has become extremely competitive and condensed (Levitt, 2017). When numerical values on a test become the motivating force behind instruction and learning strategies, students are forced into a system of rote memorization and must adhere to a mass-produced strategy for alleged student success. Standardized tests have overstepped their significance in measuring the quality of students and teachers, as while scores may rise with increased pointing instruction, the impact of a classroom on a student’s creativity, collaboration, and interest may degrade.

Levitt (2017) discusses how teachers nationally in many school districts had to use scripts and lessons provided by commercial or state sources, rather than having the ability to design their lessons to cater to the needs of their class. As education mutates from an individualized approach to a manufactured outline of the educational structure, students will develop in the absence of the instructional freedom to learn in an environment catered to their needs. A district’s requirement for teachers to use curriculum developed by the corporate test makers “compartmentalizes thinking, privileges profit-making companies, narrows the creativity and professionalism of teachers, and limits meaningful student learning” (Brooks & Dieta, 2012/2013:65, as cited in Ross, 2014, p. 32). The ever increasing weight of high-stakes testing
results, implemented nationally by NCLB and CCSS, deprive students of the opportunity for educational depth and teachers of the opportunity to personalize their position as an educator. The high-stakes testing system compels districts to restrict the opportunities for exploration in the classroom in exchange for a higher statewide and nationwide ranking, furthering standardization’s ever constricting vice around the art of teaching. Standardized testing has consumed time and flexibility in the classroom to measure students’ education not by the quality of their learning but by the conformity of their thought process to standardized ideals.

Furthermore, teacher dissatisfaction has increased due to the presence and pressures of standardized testing. The National Education Association (NEA) surveyed 1,500 teachers, and although three-fourths of teachers surveyed described themselves as passionate about teaching, 45% of the professionals had considered leaving the teaching field due to standardized testing (Levitt, 2017). Furthermore, John Cárdenas (2020), an educator of over ten years, describes standardized testing as a contributing factor to the high teacher turnover rate in the education system of the United States. When a teacher is compelled to change the methods of their instruction to match specific high-stakes testing standards, the quality of and commitment to their instruction is likely to decrease. Without teachers’ freedom to teach as they would like, students will receive a diluted quality of instruction. The most impactful instructors are not the teachers tied to their instruction manual, but the individuals who exude passion and share their interest in a compelling, and often contagious, medium. Standardized testing does not give heed to the various strengths of a teacher and their means of instructional efficacy, but rather their quantitative impact stemming from one day’s assessment.

American University reports that as much as 15% of a school year is sacrificed for testing and test preparation, while over a quarter of a teacher’s time is devoted to assessment preparation.
Due to the intense weight of standardized test preparation, educational time is mutilated for the numerical and monetary benefit of public schools. Resultantly, students are left to grow in an environment which increasingly sees the results of a mass-produced test as the assessment of one’s aptitude. The youth of the United States are left to develop in federal conditions uncaring of their individual learning preferences or skills when they do not pertain to the principles of standardization. The federal government should no longer judge student and school success by such narrow means, especially when seeking to cultivate a future generation of capable students, not purely competent learners with a limited, alike scope of expertise. Even core subjects such as social studies are sacrificed nationally for the funding of reading and math (Ross et al., 2014). Federal officials have demonstrated their distorted view of student success and subsequently diminished all but the two subjects they saw as core to measure the entirety of a student’s quality of learning. If the United States’ education system perpetuates the inflexible model of student performance, defined by high-stakes testing, there will be hindered plasticity in individuals’ future approaches to problem-solving as they exit a system so intent on reducing education to a compact mold.

**Implementing Holistic Student Assessments**

The current United States education system is dependent upon standardized tests to measure students’ learning and the quality of schools providing instruction. However, these annual assessments, 41 being in compliance with the Common Core Standards, only narrowly provide a glimpse into the instructional context of the diverse learning environments in the United States. When government funding is determined based on performance in reading and math scores alone, not only are schools compelled to teach in compliance with the test, but students are also disregarded in their other areas of strength and growth. A greater emphasis on
developing students’ soft skills—pivotal aspects in the professional world such as critical thinking, problem-solving, collaboration, presentation skills, and creativity—is necessary to ensure that students graduate the system in which they have spent approximately thirteen years of their lives ready to contribute to and succeed in the capitalistic society of the United States.

First, a decrease of emphasis on standardized testing results is necessary to reform the current standardized system. Test scores only display one aspect of a multi-dimensional student and learning community, and schools with different strategies for instilling growth in students coming from a reduced base knowledge may be overlooked by current rating and funding systems. The federal influence which promotes national testing-based standards, such as the “Race to the Top Fund” which allocated funding in a competitive manner based on the high-stakes testing of the Common Core State Standards (Levitt, 2017), must be retired to instead promote funding more equitably to schools with the greatest potential for improvement through funding. Though the United States education system as a whole needs greater financial resources, we suggest a federal measure that removes the funding of schools based solely upon high scores in standardized tests. The administration of standardized tests cost states 1.7 billion dollars in 2012 (“Creative,” 2018), demonstrating the ineffective drain standardized testing has exerted upon school funding. A rerouting of these funds could reestablish the development of the arts, social studies, and science programs which were cut due to a rising emphasis on reading and math instruction, as well as spur the development of new instructional programs critical to student success.

Standardized testing, and the high-stakes testing standards which facilitate the assessments, can be substituted with more soft-skill-oriented alternatives. In performance or portfolio-based assessments, students are able to engage in team collaboration or individual
projects, as described by NPR education consultant and author Anya Kamenetz (2015), which more so encompass the rigor and environment established in a professional workspace. Students’ efforts over time would be assessed in a more individualized manner and congregate to represent their success, instead of letting a single day’s test quantify their skill. Portfolio or performance-based assessments include reports, papers, presentations, and a variety of other mediums that can demonstrate a concentrated contribution to an assigned topic (Kamenetz, 2015). Students would be given the ability to advance their understanding and demonstrate their academic skills in a variety of means and subjects, altogether representing the multidisciplinary nature of life. In assessing international data of the education systems in 56 different countries, Thijs Bol and Herman Van de Werfhorst (2013), professors of sociology from the University of Amsterdam, found that increased standardization of schooling led to decrease in the performance of students and “[m]ore autonomous schools seem to enhance the performance of students” (Bol & Van de Werfhorst, 2013, p. 21). Thus, a greater level of autonomy in teaching, through removing the constrictions of standardized-testing-based instruction and high-stakes tests, would facilitate student growth and academic excellence. Performance and portfolio-based assessments offer flexibility as to how and what a student chooses to research and present, as well as plasticity in the guidelines teachers will choose to establish.

Additionally, to maintain accurate and unbiased reporting, check steps such as government official inspections, representing the state or federal bureaucracy, can ensure the accuracy of the reports evaluating students’ assessment performance. Recordings and copies of the assessments can be submitted or kept by schools to be reviewed by officials to ensure accurate scoring. Inspections (Kamenetz, 2015) can be run in tandem with government officials’ review of students’ performance, where representatives will observe and assess the
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

educational environment formed by each school. An inspection system can be used to observe a sampling of the quality of education students receive and jointly evaluate the schools along with the projects students have created in place of standardized assessments.

Alternatively, to evaluate the performance of students over time, stealth assessments can be used to evaluate students’ quantitative learning and growth. Technological programs offered by textbook companies and nonprofits, such as Khan Academy, offer quizzing software in which students can continually learn and practice various elements of a core subject (Kamenetz, 2015). Stealth assessment refers to measuring a student’s performance based on their scores on the software, within the context of the amount of time they spent practicing (Kamenetz, 2015). Furthermore, the software is consistently accessible to students and does not represent their performance on a single test day, but rather a conglomeration of their efforts throughout the learning process. Teachers are able to monitor their pupil’s performance and identify their specific weakness areas, while also gathering scoring data.

School districts will be able to determine the education and assessment styles that best complement their students’ and community’s needs without high-stakes tests dictating the teaching practice necessary to cultivate student success. Holistic assessments will instill practices in students that will prepare them for success in their future careers and subsequently further the prosperity of the United States. Tina Calderone (2020), a member of Seminole county’s school board, stated “I believe in local control. We [county government officials] truly believe in local control. We understand more than the electoral officials in Washington D.C.” With the detrimental effects of high-stakes testing standards, a community-centric approach to education could more accurately reflect the education best suitable for the local youth. An end to the federal government’s promotion of national standards based on testing would grant districts
greater independence. Representatives would directly address the concerns of the parents and students subject to the current education standards assessments and be able to alter how schools are evaluated. With a movement from standardization to a personalization of the learning experience, students would receive enrichment as they grow throughout the development of their assessments just as one grows throughout the efforts of their career.

**Subarea #3: Financial Literacy Education**

*Current and Past Issues Influenced by a Lack of Financial Capability*

The education system in the United States plays a significant role in the lives of students and families, many of whom are low to moderate-income. Students who come from low-income backgrounds do not often receive the opportunity to experience managing money. It can be argued that by enforcing a better way for students to learn financial capability, current students could obtain a healthy future savings rate and have sufficient savings for retirement. The Federal Reserve Board of San Francisco, in 2005, announced that households in the U.S. have become less inclined to save and become more inclined to make purchases (Mandell & Klein, 2009). Prioritizing spending over saving is already an issue in itself. “Americans have had a negative savings rate and Americans have insufficient savings for retirement” (Guidolin & La Jeunesse, 2007). Individuals have prioritized spending, having a direct impact on their insufficient amount of savings. Students cannot learn financial literacy from parents or guardians who do not have any financial literacy skills themselves. The implications of this are alarming.

Furthermore, not only will a lack of financial capability have a negative effect on students and their families, but it will also impact the United States economy. “[L]ow U.S. savings rates hinders capital development and contributes to our massive trade deficit which increases foreign ownership of our assets and claims on our future national income. This, in turn,
will further lower the financial welfare of our citizens in the future” (Mandell, 2006). In addition to the lack of financial literacy and financial capability affecting the lives of the students, it will also weaken the economy of the United States. By relying on foreign ownership of United States’ assets, national income lowers, potentially reducing the amount of money available for people to obtain, leading to a cycle of financial instability for everyone involved. Trade deficits were to blame for the majority of the 2.4 million job losses between 1979 and 1994 (Scott, 1998). People could potentially lose their jobs and their only source of income by a trade deficit, potentially making them have to rely on loans to pay their bills. An increase in imports “puts downward pressure on the wages of U.S. workers” (Scott, 1998). A decrease in the prices of certain products “puts downward pressure on prices in the U.S. Domestic firms are then forced to cut wages or otherwise reduce their own labor costs in response” (Scott, 1998). In addition to the loss of jobs, people who maintain their jobs could have their wages reduced. Numerous people rely on the benefits they receive in their jobs to pay for services, eliminating these benefits would eliminate some of the services some people are able to obtain. There is a clear need for financial education as it will impact the current students, as well as the economy.

Students spend a significant amount of time in school each year and can often apply what is learned at school in their lives outside of it. The knowledge learned in school is a foundation for students’ intellectual growth later on and is crucial for forming a cultivated individual. The education system of the United States must find a way to contribute to students’ financial knowledge and prepare them to be financially capable in order to counter the detrimental absence of financial management widespread in the United States.
To understand the effects of previous financial interventions and the need for effective instructional methods, one has to first understand the difference between financial literacy and financial capability. Financial literacy refers to the knowledge, skills, and confidence that are critical for controlling one’s income (Remund, 2010). While financial capability involves the way someone’s financial knowledge influences the way they manage their money and make financial decisions (Mottola, 2014). Financial capability is essentially the ability to apply one’s financial literacy into their economic decisions, thus, it is crucial for the financial prosperity of an individual and a family.

**Problems in Previous Financial Literacy Education**

Jump$tart Coalition for Personal Financial Literacy, an organization that focuses on enhancing youth personal finance, distributed surveys to 79 high school graduates from three different schools in the same school system in the United States who either had or had not taken a course in personal finance and money management. The results of the surveys indicated that students who took a high school class in personal finance or money management do not display qualities of knowing more financial literacy than students who did not take the classes (Mandell & Klein, 2009). The surveys were taken during the first five years after graduation and covered the “four key areas of income, money management, savings and investing, and spending and credit” (Mandell & Klein, 2009). The surveys conducted by Jump$tart Coalition for Personal Financial Literacy were done to different groups of students six different times from 1997 through 2008 and found that an average grade of 58% has been the highest earned in all those years (Mandell & Klein, 2009). The average grade on the surveys is astonishingly low. A direct reflection of the American education system’s current inadequate financial literacy instruction. The Jump$tart Coalition for Personal Financial Literacy surveys were conducted after the
students in each of the surveys graduated high school to discern if the financial knowledge obtained in high school was utilized in the students’ lives. Since the survey was taken during a time when most students had not yet settled in their preferred career jobs, the financial literacy learned from the course was most likely not yet able to be applied in the students’ lives (Mandell & Klein, 2009). Imagine the results of the survey after twenty years of having taken the financial literacy courses.

The survey findings of Jump$tart Coalition for Personal Financial Literacy highlight the failure of previous financial literacy courses in establishing students’ lasting comprehension. A common trend found by Fernandes and his team of researchers from the Institute of Operations Research and the Management Sciences, is that students in past financial literacy courses were only assessed on whether they knew certain financial literacy terms. Various financial literacy courses in the past have neglected teaching students financial literacy skills and instead allowed the learning of students to be merely memorization-based. Financial literacy is most often measured by scores on tests that determine the students’ financial knowledge. Financial literacy tends to be dominated by measures of knowledge, decreasing the importance of having financial skills (Fernandes et al., 2014). Financial literacy tests tend to be unhelpful in defining a students’ financial literacy as they tend to ignore the skills needed in real life. If students are unprepared to be in future economic scenarios, they won’t be financially capable, hurting them and potentially leading to them acquiring debt. Ashley Wentzell (2020), a Member Advocate for Suncoast Credit Union, stated that some young teens who come to her credit union struggle with basic finance and many adults have to take out a loan in order to support themselves.
Some people have to take out loans to simply live their lives. Taking out loans could have potentially been avoided if those people were informed on how to make adequate financial decisions earlier on in their lives.

It would be crucial for teachers to receive extensive training before being able to teach students about financial capability. Teachers who teach financial literacy in the curriculum could severely affect the students if they are not proficient in their financial literacy. A study done by the Global Financial Literacy Wellness Center at the George Washington University School of Business stated that about 65% of teachers of various subjects that were surveyed feel driven to teach personal finance. However, it is believed that with proper training, teachers’ motivation will be expanded (PR Newswire, 2019). Since teachers will be the ones teaching financial literacy and financial capability to students, they must feel comfortable enough to do it. If teachers receive proper financial training, their confidence in financial literacy and financial capability will increase, making them more comfortable with the subject. Rearranging the education system in the United States could result in a significant amount of money spent. However, reducing the amount of standardized testing would result in more time and money available which could be spent in making a system in the schools that would allow the students to become future-ready.

**Integrating a Financial Literacy Thematic Unit and a Mini-Society Simulation**

All students have different future plans and learning styles. Thus, it is crucial to provide the classes and programs necessary for students to achieve financial capability prior to graduating from high school. We propose the integration of a financial literacy-based thematic unit into the curriculum of the education system in the United States. A thematic unit involves several subjects that are connected in numerous ways to a theme and ours would be implemented
from elementary school through high school with the central theme of financial literacy. Thematic teaching supplies “methodology for students to utilize otherwise fragmented knowledge and thought processes to help make connections and solve problems in the real world by involving other disciplines” (Moyer, 2016). A thematic unit in the curriculum would allow students to draw a connection with the learning obtained from each thematic core course while making relations to experiences outside of school. By obtaining knowledge in financial concepts like interest rates, students would be able to apply these concepts in future situations efficiently.

Teaching financial literacy concepts would be a part of the standard for English, math, and social science classes from third through 12th grade. The three fundamental topics of financial literacy are interest rate calculations and interest compounding, inflation, and risk diversification (Lusardi, 2019), the three topics would be taught in our curriculum. Math classes would have word problems involving the three topics fundamental to financial literacy as well as various other financial literacy-related topics. For example, students could be taught about inflation and solve mathematical problems that discuss hypothetical economic scenarios. Through the core classes, students would understand the importance of saving and having an emergency fund. As teaching financial literacy would be part of the standard for several core classes, teachers could be presented with an example of different methods to teach financial literacy and change their lesson plans accordingly. Financial security is pivotal for an individual and their family in case of an unexpected event that directly affects their economic situation, as the money saved would allow the impact of the occurrence to be less severe. Financial-literacy-based word problems would enable students to connect the teachings in class to their future financial aspirations. Thus, preparing the students economically and keeping them from making decisions that would stunt their economic success.
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

For English classes, non-fiction books regarding the three topics fundamental to financial literacy, as well as many more, would be part of the subject’s standards. Non-fiction books would allow for teachers to read books with students. If students were to encounter financial terms they did not comprehend, the teachers would be able to explain the terms to them. In social science classes, the students would learn about historic events that have impacted the economy, as well as market trends and the historic developments of financial resources like banks and stocks. The thematic unit would ensure that all students, regardless of what electives they choose, would have the opportunity to learn about financial literacy in their core classes.

The thematic unit is only a part of the solution as it relates more to financial literacy. Students would then need a medium to develop their financial capability. In our solution, we propose an experience similar to real-life referred to as a mini-society simulation. First created by Marilyn Kourilsky, of the Kauffman Center for Entrepreneurial Leadership, the mini-society incorporated students into a simulation of what a real economy would be like (Vanfossen, 2003). Introducing the students early to an economy simulation would be beneficial to allow the students to get used to an economy when they enter a real one.

Our version of the mini-society would be introduced to students in the third grade and be done up to 12th grade. The continuation of the simulation throughout the years would allow the students to become used to the idea of having a job and making their own economic choices. The economic choices would include choosing what to purchase and whether to spend past the amount of money they possess. The mini-society simulation would either be done once or twice a year and be done during a core class. In the simulation, students would learn about how to interact with the United States economy (shopping, working, etc.) and experience working in a society similar to the one they will join as they enter the adult world. By having to communicate
with each other when buying or selling something, and when going into debt, students would also learn to practice their communication skills. By learning how to communicate efficiently and learning how to manage their debt, students would gain financial confidence and most likely, apply their knowledge from the mini-society simulation into their lives outside of the simulation.

The program would also incorporate the importance of saving and investing. We would have students make a budget where they would ensure that they have a sufficient amount of money to purchase their products. We would like to incorporate jobs in the simulation because we believe it would be beneficial for students. The interaction of the students in the simulation could make it more fun for students to learn, therefore making a mini-society simulation effective. “Jump$tart surveys have shown consistently that high school students who play a stock market game are significantly more financially literate than those who do not. This implies that classes that are interactive, relevant, and fun may be more effective than those that are purely didactic” (Mandell & Klein, 2009). Playing a stock market game allows students to not only learn, but also be interactive in their learning because students are able to make the decisions. Similarly to the stock market game, the mini-society simulation allows the students to learn about financial literacy topics while at the same time, the students are able to actively participate and apply their knowledge to the decisions made during the simulation. The way the students perform in the mini-society simulation would demonstrate whether they are financially capable or not and in what areas they need to improve.

Reconstructing the current United States education systems’ financial literacy and financial capability teaching methods would allow students to develop their financial capability which would affect them as they make financial decisions later on. With the integration of our thematic unit and mini-society simulation, students could experience life-long financial
ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.

capability. “Rigorous financial education programs, coupled with teacher training and high school financial education requirements, are found to be correlated with fewer defaults and higher credit scores among young adults in the USA” (Urban, et al., 2018). By obtaining proper financial education, as well as with their teachers having proper training, students will be able to manage their credit scores more efficiently, allowing a better financial situation for them.

"Financial literacy is also associated with higher returns on investments and investment in more complex assets, such as stocks, which normally offer higher rates of return....from 30 to 40% of U.S. retirement wealth inequality can be accounted for by differences in financial knowledge” (Lusardi, 2019). By introducing the youth to financial literacy and financial capability early on, there could be a long-term effect on their lives that will even affect the amount of money they have for retirement. The youth are the future, by securing the financial capability of the youth, one secures the financial capability of the United States.

**Overarching Solution - Proposed Reform**

The education system of the United States has yet to fully prepare students for their lives as they graduate and integrate into the professional world. Amidst the absence of equitable education quality, constructive performance assessments, and impactful financial preparedness in the public school system, students are instilled with a limited breadth of knowledge and are granted a disservice by the current systems in place. Imminent reform is needed in the public school system regarding funding, standardized testing, and financial literacy instruction to cultivate an impactful education for the youth of America.

Regions with clear disparities in school quality, due to unequal funding, hinder students in their later success as students are not provided the opportunities students in well-funded schools have to offer, be it high-quality resources, teachers, or infrastructure. To resolve this
disadvantageous concept, a progressive property tax can be instituted to gather funds across the regions with disparities, as opposed to deriving local funds solely from the immediate area. In finding an alternate source of funding, tax revenue can be conglomerated from the areas of various wealth in a governing region, such as a county, and distributed equitably to ensure all students receive a quality education. Thus, the United States establishes an educational environment reflective of its ideals of freedom of opportunity and equality to bolster future generations who will shape the nation economically and socially. Through leaving students with a high-quality knowledge base, the future of the country will be fortified as a result, and the school system will be more viable in assuming additional reforms when education is instituted in equity.

Building from an equally opportune education in any public school, due to an even distribution of funding, we now move to address the dependency upon standardized testing derived from recent federal education policy. Within the last two decades, standardization of assessing school quality has altered the educational experience as schools are dependent upon testing results from one day to summarize a year of comprehension and determine corresponding school ratings and funding. In the wake of a constricting curriculum, often reflective of the intent for students to test well rather than students’ engagement, we propose a reform of the assessment method used to measure schools’ performances. In lieu of standardized tests issued at the statewide or national level, performance-based assessments can be implemented as students’ key medium of demonstrating their abilities. When individuals are able to present their understanding through a portfolio or performance-based assessment, the data derived from rating the presentations is more holistic. Students will develop skills critical to the professional world and display their efforts over time to accurately encompass their learning experience. With an
emphasis upon building one’s knowledge as they work, students engage in active learning through their assessments to develop the abilities crucial for career and financial success.

Furthermore, with the cultivation of professional skills to enable students to later reach financial success, students have to be aware of financial knowledge and practices to establish and maintain their financial security. Thus, to help students understand and apply financial practices, we propose the integration of a financial literacy thematic unit into the education standards held by each state in the United States. Through including financial knowledge in preexisting courses, the comprehension of pivotal financial principles is adopted intrinsically through consistent interaction with finance-themed math problems, economy-centric social studies lessons, and budgeting-centric readings, for example. Additionally, to reinforce financial comprehension derived from the thematic unit, a mini-society simulation can be established in a classroom where students from grades third to 12th can actively practice the financial concepts they learned through instruction. With the absence of large-scale standardized tests in the education system, more time and funding will be available for schools to apply towards constructive programs. Students will then be able to delve into economic circumstances to experience their financial future first-hand.

As the education system of the United States’ prepares the youth of America for their participation in the world of enterprise, there are clear discrepancies in the goals which the federal government hopes to see students achieve and the current systems in place to execute these measures. Though public school is available to every student in the U.S., the quality of these institutions is dependent largely upon the wealth, or lack therefore of, in the surrounding area. Thus, a progressive property tax will aid in leveling these inequities of learning and establish a better-educated student population. Then, with the implementation of assessments
alternative to standardized tests—which currently consume the time, content, and personalization of instruction—students will be able to enrich their learning in a comprehensive and skill-based format. Lastly, with the integration and practice of financial literacy in the educational curriculum, students will experience a greater awareness of the financial systems and habits critical to a life of financial success. The current educational system denies students the opportunity to learn through conditions of equity, engagement in assessments, and enrichment through financial experience, but, through the aforementioned proposal, students will be equipped with the knowledge base to achieve financial capability.
References


ESTABLISHING REFORM IN THE EDUCATION SYSTEM OF THE U.S.


