# THE IMPACT OF DANCE ON LOW-INCOME STUDENTS

by

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## Abstract

This paper discusses the potential impact of dance on low-income students. This research looks into current gaps in student performance between low-income students and their more wealthy peers. In order to both ascertain the reason for these gaps and seek ways to use dance to alleviate them, the research continues into the history of public education and specifically public education for low-income students.

To look into how dance can improve education for low-income students, various existing programs were studied, from general arts programs to dance-specific programs and strategies. This research showed that there is a connection between participating in dance and better school engagement, motivation, creativity, and self-confidence, all key to improving not only student performance but also their education as a whole. Students who are confident, creative, motivated, and engaged are those that are sought by employers and those that believe in their own abilities. As such, opportunities to include dance in schools and classrooms should be pursued as a way to alleviate educational gaps between low-income students and their wealthier peers.

**The Impact of Dance on Low-Income Students**

In the United States the achievement gap between low-income students and their middle- and high-income peers has been documented for over 70 years. Today, the average gap in math test scores between students eligible for free or reduced price lunch, that is, low-income students, and those ineligible is 23 points. No state has scores closer than 15 points, with the greatest difference being 38 points in the District of Columbia (State Student Group Scores and Score Gaps, Mathematics, 2017). The gap is even bigger in reading scores, with the average being almost 27 points. In reading, no states' scores are closer than 19 points, with the District of Columbia again recording the largest gap at 41 points (State Student Group Scores and Score Gaps, Reading, 2017). This gap has been long documented and many have posited reasons for why it exists. It is necessary now to look to ways these gaps can not only be addressed but amended.

Arts programs provide one possible option for alleviating these gaps. Arts programs in schools have resulted in higher test scores, graduation rates, and creativity levels (Metla, 2015). These programs include dance, music, drama or theater, and visual arts classes. However, these programs faced budget cuts following the Great Recession in 2008 and 2009. While all arts classes faced these cuts, dance and drama classes fared the worst. Out of the 20% of schools who offered dance and theater classes in the 1999-2000 school year, only three percent offered dance and four percent offered theater in the 2009-2010 school year (Metla, 2015).

This problem is even more pronounced in low-income schools. Many low-income schools, faced with increasing pressure regarding standardized test scores, shifted more of

their already limited resources toward remedial core class instruction and away from arts programs (Edsource Staff, 2014). For students from wealthier backgrounds, the lack of arts programs in schools can be alleviated through extracurricular programs. However, these tend to be expensive and data shows that children living at or below the poverty line participate in extracurricular sports, clubs, and lessons at a rate eight to ten percent lower than their peers living above the poverty line (U.S. Department of Education, National Center for Education Statistics, 2011).

While arts programs such as visual arts and music require supplies and equipment that can be expensive, creative dance programs can be conducted with little to no equipment. There are many community dance programs that seek to remedy the gap not only between participation in extracurricular activities, but also in school performance between low-income students and their wealthier peers. These programs have reported success in many forms, including better attendance, higher rates of knowledge retention in other subject areas, and self-reported gains in confidence, tolerance, and persistence (Bonbright, Bradley, & Dooling, 2013). Creative dance programs offer a low-cost option to give students new opportunities and provide multiple benefits to themselves and their education.

## History of Public Education

First, it is important to consider the reason why the achievement gap exists. One answer lies in the history of education—who it was made for and why. Public education, or free education available to all, is relatively new to society. Most past societies only educated the children of the wealthy, because they were the only ones who would participate in areas

requiring it. Futures were fairly concrete—children of poor farmers and serfs grew up to take their parents' place in society and extensive education was not viewed as necessary.

The English education system of the 1600s had two tracks, one for lower classes, and one for upper classes. Children of the lower class received minimal instruction—they learned to read and write, do basic math, and received religious instruction. Upper class children received the same, but were allowed to continue on to secondary schools which gave them a more in-depth education (Cohen & Gelbrich, 1999). The Puritans of the Massachusetts Bay Colony decided to change this in their new home. In 1647, the general court of the colony decreed that every town of 50 families was required to have a primary school, and every town of 100 families should have a Latin school, another name for a secondary school ("Historical Timeline of Public Education in the US," 2006). These early schools had, at their foundation, the goal to educate everyone in the ways of Puritanism, but they also were the first to give free education to all children.

**Public Education in Colonial America**

Education in colonial America varied greatly among the colonies. New England colonies followed the example of Massachusetts Bay; many schools existed, based on a religious, mainly Puritan, foundation. In the Mid-Atlantic colonies, schools existed, but as the cultures and religions were not as homogeneous as in New England, each school based itself on the culture and religion of the area (Cohen & Gelbrich, 1999). Schools were most rare in the South. Southern colonies were highly stratified with vast gaps between the rich and the poor. Wealthy plantation owners often hired private tutors to teach their children at home, whereas children of poorer yeoman farmers received minimal education. Educating

slaves was banned in most Southern colonies. The school experience in colonial Williamsburg, Virginia, captures the essence of the Southern education system. According to Brenner and Williams (2000), at that time "there were no free public schools in all of Virginia" (p. 46). Teachers could be hired, if money was available, and classes were held in abandoned tobacco fields or the teacher's house. These schools would give a basic education to lower-class children, but this came at a price, meaning that some children were still excluded. Children of the gentry were educated, as stated above, at home, often in a separate wing or building, with private tutors (Brenner & Williams, 2000).

The issue of public education came more to the forefront following the American Revolution. Thomas Jefferson believed that literacy and self-government worked together. He saw education as an equalizer for the masses, a way for everyone to participate in government. Thus, he was a big proponent of public education. Though he saw education as an equalizer, he proposed two tracks for it. He labeled these tracks as the "laboring" and the "learned." Much like the old English system, the laboring class would only receive a basic education. However, Jefferson proposed a scholarship system to give further education to the most talented of the laboring class. He termed this "raking a few geniuses from the rubbish," (Brennan, 2001, para. 11). These students were selected through yearly examinations. While poorer children relied on these scholarships to continue on, children of the wealthy could continue as long as they wished and as long as their parents were able to pay the tuition fees. Thus, Jefferson's education system did not equalize the masses, but continued to elevate those who could afford the higher education necessary to become a pivotal part of the budding government.

**Public Education in the 19th Century**

Schools again began to change at the turn of the 19th century, when wealthy businessmen in New York noticed an alarming trend. They lamented the condition of lower class children, noting that their parents were "unable to defray the expense of their instruction" and as a result, the children would inherit "those vices which idleness and the bad example of their parents naturally produce" (New York Free School Society, 1805, para. 1). They feared that these children, apparently lacking in morals and industry, would cause problems and instigate crime in the city. Thus, in 1805, they formed the New York Public School Society. Their goal was to provide education for children from the lower class. Their schools ran on the Lancasterian model of education—one teacher for hundreds of students. This system functioned by using the older students as teachers. Older students were first given rote lessons and then spent the remainder of the day teaching the younger students. While these schools gave a free education in reading, writing, and morals, they emphasized discipline and obedience, with the goal of preparing the children to be better, more submissive, factory workers ("Historical Timeline of Public Education in the US," 2006). This marked a new shift in the purpose of public education from Jefferson's goal of civic participation to training students for their future life in factories, and thus served as a method to maintain the existing social system. As of yet, there were still very few job prospects besides factory and menial work for low-income children when they became adults.

Early in the 19th century, most low-income students only attended primary school. While the first public secondary school was established in Boston in 1821, education beyond the primary level was still financially unavailable to most. James G. Carter, an advocate for

public and against private schools, noted that the primary schools were meagerly equipped and poorly staffed, and thus they could not give an equal education to the poor children to which they catered. Further, there were few schools for them to move on to. Carter wrote that "many a poor and industrious man would spare the labour of his son, and give him an opportunity to learn...while the means were in his own town, who could but ill afford a considerable tax for tuition, and the price of board in a neighboring town," (Carter, 1824, para. 13). The secondary schools that did exist in much of the United States were boarding schools, requiring parents to pay not only tuition, but also room and board—a price out of reach for many. Several of these secondary schools were private and had opened in response to the few public ones that were opening. The main purpose of this was to segregate students by income, with the rich desiring for their children to go to private schools, where they could have a better control over what they learned and with whom they learned. Carter believed that "the rich...will patronize and improve the condition of the academies for their own accommodation; while the poor will be left with no advantages above the primary schools," (Carter, 1824, para. 13). Carter posited that if the rich continued to segregate themselves, the public schools would be cast aside by the government. The members of the government at the time were from the upper class, and if they did not use the public schools, they would find them unnecessary. Carter argued that this would lead to a lessening of government support for the public schools. Were this to happen, it would not be the ones making the decision—the rich—who would suffer, because they did not use the publicly-funded schools. Instead, it would be the poor—those who could not take a larger part in government or make a bigger impact with money—who would be forced to use the schools (Carter, 1824). This

was one of the first times that someone commented on the inequality of education. Formerly, those in the place to publicly comment on education—the rich and the well-educated—believed that the poor received enough education for their place in society. While many continued to hold this belief, some began to consider that system unfair.

Horace Mann emerged as a prominent reformer in the mid-1800s. Like Thomas Jefferson, he believed that education was essential to self-government. However, Mann believed that all children should receive the same, high-quality education, provided by well-trained teachers. He also argued that education should be free of religious influence in order to be open to all children, and that education must be paid for by an interested public (Cremin, 2019). Under Mann's leadership, Massachusetts passed its first compulsory education law in 1851 ("Historical Timeline of Public Education in the US," 2006).

**Industrialization Brings Changes to Public Education**

The late 1800s brought increased industrialization to the United States. With it came increased immigration, with approximately 22 million immigrants arriving between 1890 and 1930. In this group were about three million children, some of whom entered the school system immediately. Others went to work in factories and mines to support their families. Discouraged with the 50% school attendance rate during the early 1900s, progressive reformers pushed for child labor and compulsory education laws (Mondale & Patton, 2001). School attendance gradually increased in the years following the original passage of the Keating-Owens Act in 1916, which banned the labor of children under 14 years of age.

Public education during this time was intended to civilize and Americanize new immigrants. New York city schools were the most stringent, maintaining English-only

schools before the rest of the country. Before World War I, many other cities had schools which taught in the language of the major immigrant group, such as German. After America entered the war in 1917, the English-only movement gained ground. Former president Theodore Roosevelt led this movement, declaring that "we have room for but one language here" (Mondale & Patton, 2001, 19:33-19:39). Soon, 35 states required schools to teach only in English. This created a "sink or swim" mentality, in that students who may have spoken little to no English had to attempt to learn in classrooms where that was the only language of instruction and communication. The main form of instruction in this time was a uniform, one-size-fits-all method, frequently termed "toe the line," in which students came up to the front of the classroom and stood in a line to recite their lessons to their teachers (Mondale & Patton, 2001, 6:01-6:20).

**The Reintroduction of Tracking in Public Schools**

Education began to change again in the 1920s. Ellwood Cubberley pioneered the push against the one-size-fits-all idea of education, arguing that some students were more capable than others. Aiming to increase school efficiency, schools began introducing tracking again. High schools began dividing students—girls received home economics classes, while boys were split between college preparatory classes and industrial education. Seeking an efficient way to divide students, schools turned to newly popular tests to determine students' intelligence quotients (IQs). Although these tests used many questions to determine a child's aptitude and capacity for learning, they were often based on the background knowledge of students of Western European backgrounds (Mondale & Patton, 2001). Thus, the tests claimed that ethnicity impacted intellect, with students of British descent scoring highest.

This resulted in a reinforcement of the existing social hierarchy, keeping recent immigrants and minorities in the working class by not allowing them access to higher education.

The IQ movement tended to write off those not defined as smart enough for college preparatory classes. This was especially apparent in schools for minority students. Two-thirds of Mexican-American children in Los Angeles in the 1930s were classified as "slow" based on their test scores and heritage. This resulted in schools for Mexican-Americans dominated by industrial training and vocational work, with few opportunities for college preparation. In the south, schools for Black students were similar. Black girls were taught domestic work and Black boys were taught skills using their hands, such as carpentry and car repair (Mondale & Patton, 2001).

While the industrial and college preparatory tracks covered two groups of students, educators became increasingly concerned about the average students during the 1950s. A new form of education was introduced—life adjustment. The aim was to make school relevant to these students, and they were given practical life lessons on subjects such as dating and family disagreements. As the Cold War dawned, this was condemned as a move away from intellectual pursuits. The 1957 launch of the Soviet rocket *Sputnik* changed education once more. Dismayed by being beaten by the Soviets, American leaders sought to remedy their perceived shortcomings. U.S. leaders believed the fault lay with the education system and introduced the National Defense Education Act in 1958—the first time a large amount of federal money was given to public education. With this, schools again changed back to a more traditional, less tracked model. Schools began to focus more on science and

math, emphasizing the subjects necessary to catch up with the Soviet Union (Mondale & Patton, 2001).

Despite these changes, in 1983, a startling report entitled *A Nation At Risk* was published. It exposed faults in the American education system once again. It showed that American schoolchildren had fallen behind other countries in test scores, and, for the first time, were at risk of underperforming their parents. Though it garnered national attention, lasting change was limited.

**Public Education in the 21st Century**

The twenty-first century brought still more changes to schooling. Though standardized testing had been increasing during the late 1900s, the No Child Left Behind Act of 2002 increased the pressure on students and educators to show growth each year, imposing penalties on those schools that did not. Schools least likely to meet growth included those in low-income areas, many of which included students who came into school less well-prepared than their more wealthy peers. As these schools failed to meet growth, increased pressure led to schools focusing more time on core subjects—reading, math, and science—and less time on other activities, such as art and recess. According to the National Center for Education Statistics, in the 2017-2018 school year, third-grade students in schools with more than 75 percent poverty spent 30 more minutes on language arts lessons per week than their peers at schools with less than 35 percent poverty. In math and science, students in the highest-poverty schools spent between 10 and 40 minutes more per week in those classes, with the deficit being made up by spending less time in art and recess than their wealthier peers (Taie & Goldring, 2019).

# Public Education for Low-Income Students

Low-income students have long been subjected to lower quality education than their high-income peers. From class-based tracking to biased testing, these students have faced historic challenges to their academic success. But how does this function today? How do today's low-income schools and districts compare to others?

## Education Expenditures Across the Country

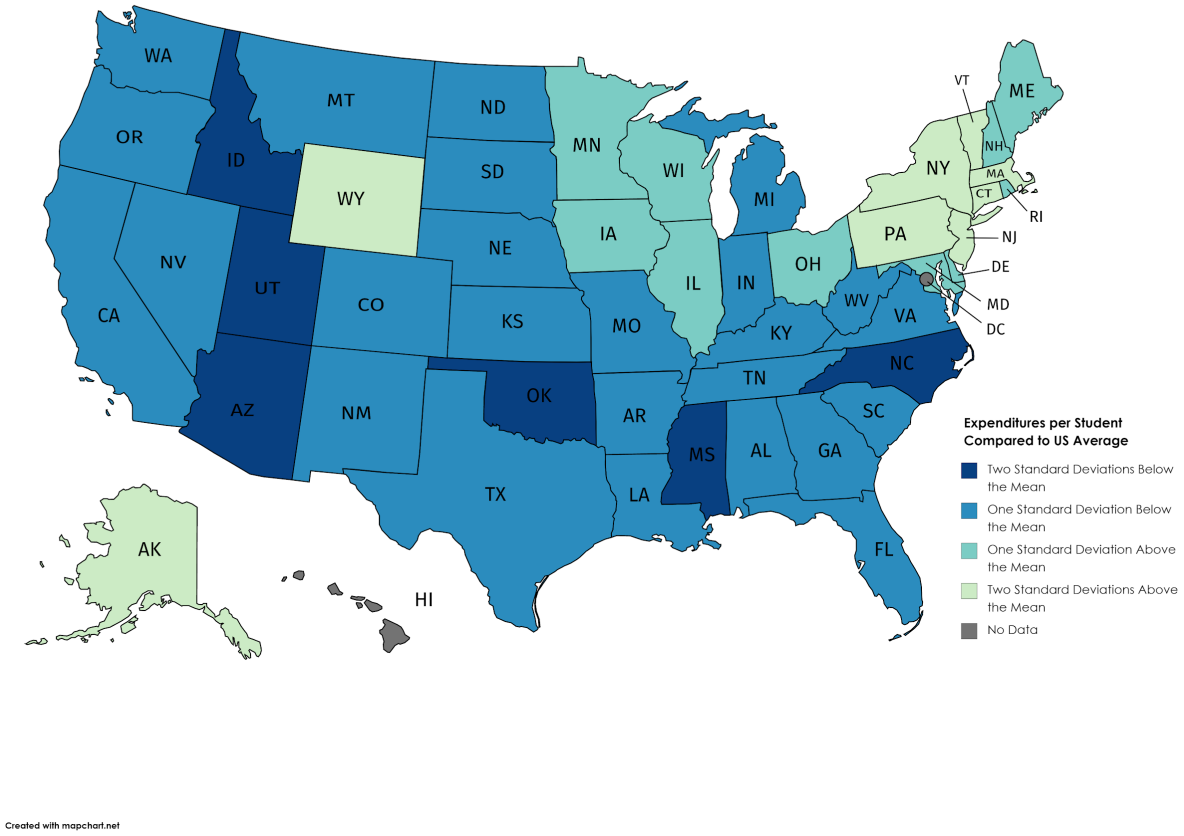
The first step is to take a look at education spending as a whole. Per pupil spending varies greatly across the country, with the national average being $10,755 per year (Baker, Farrie, & Sciarra, 2018, p. 10). Eight states spend more than two standard deviations (standard deviation = $3,405) above the national average per pupil. Most states spend below the national average, as 25 states fall within one standard deviation below the mean (between $7,350 and $10,754) and six states spend less than $7,350 per pupil (two standard deviations below the mean).

Lower funding is concentrated in the Southern states, including both Southeastern and Southwestern states. All of the states of the Deep South—Alabama, Georgia, Louisiana, Mississippi, South Carolina, and Texas—spend less than the national average, with the top spender being South Carolina ($9,560 per pupil). This region's experience with public schools is relatively new, with traditions from the plantation era advocating for private, rather than public, funding of education. In contrast, all of the states of the Northeast—Connecticut, Massachusetts, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont—spend above the national average, with most spending more than two standard deviations above the mean (greater than $14,161 per pupil). Public schooling originated in

this area, with many advocates of free and equal public education hailing from these states. Recall that the first law providing for public schools came from the Massachusetts Bay colony, and New York, the top spender per pupil, is the home of an early public school movement—the New York Public School Society.

**Figure 1**

*Expenditures per Student Compared to the U.S. Average*

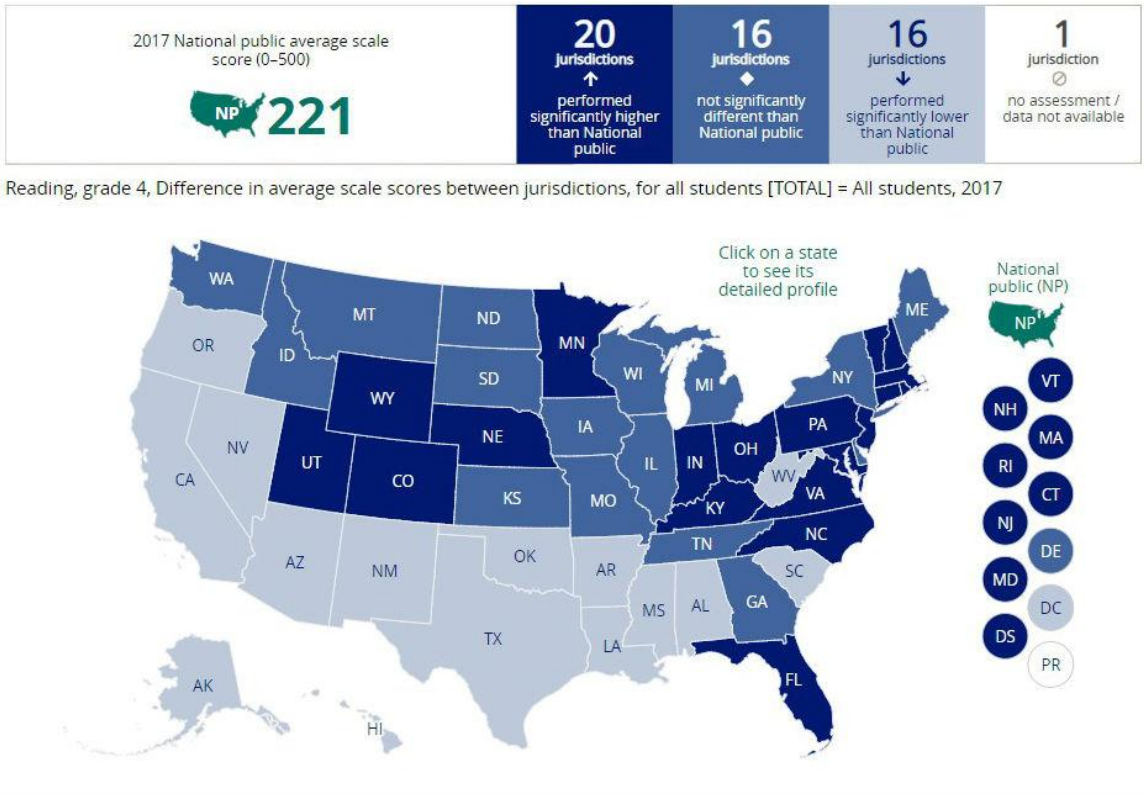



The spending patterns of states are relevant because education expenditures relate to student test scores. On the 2017 Grade 4 Reading tests, 15 states and the District of Columbia performed significantly lower than the national average (State Performance Compared to the

Nation, 2017 Grade 4 Reading, 2017). All of these states, with the exception of Alaska, spend below the U.S. average per pupil. In addition, many of these states lie in the South, including South Carolina, Alabama, Mississippi, and Louisiana. Many of the states that scored at or above the national average were states with spending higher than the U.S. average, including Vermont (third highest), Wyoming (fourth highest), and New Jersey (fifth highest).

**Figure 2**

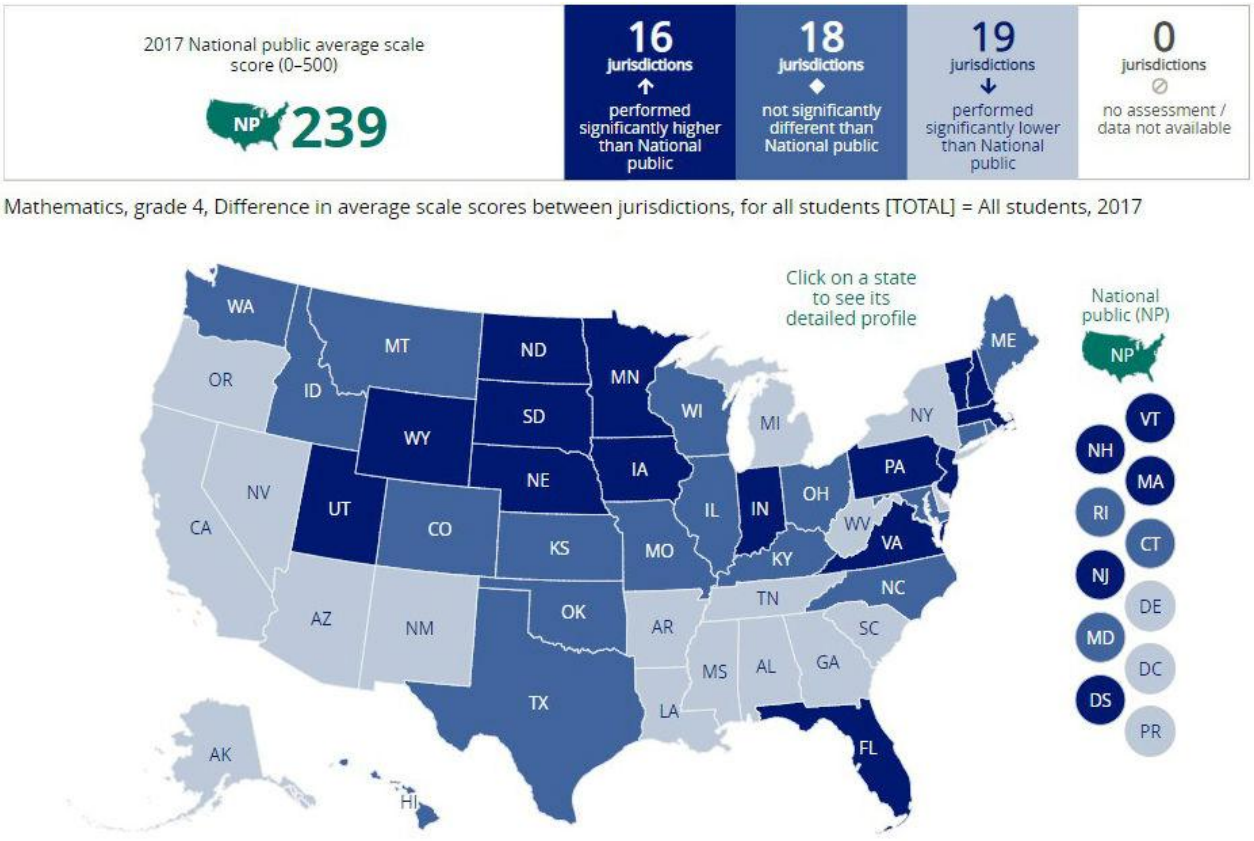
*State Scores on Grade 4 Reading Test Compared to the National Average from State Performance Compared to the Nation (Reading) by U.S. Department of Education, 2019, The Nation's Report Card. Retrieved September 17, 2019 from https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=RED&sj=AL&sfj=NP&st=MN&year=2019R3*




A similar pattern can be noted on the 2017 Grade 4 Mathematics tests. Arizona, Mississippi, and Tennessee—the states ranked 48th, 44th, and 43rd in spending, respectively—all scored significantly lower than the national average. Again, Vermont, Wyoming, and New Jersey all performed significantly higher than the national average (State Performance Compared to the Nation, 2017 Grade 4 Mathematics, 2017).

**Figure 3**

*State Scores on Grade 4 Mathematics Test Compared to National Average from State Performance Compared to the Nation (Mathematics) by U.S. Department of Education, 2019, The Nation's Report Card. Retrieved September 17, 2019 from https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=MAT&sj=&sfj=NP&st=MN&year=2019R3*



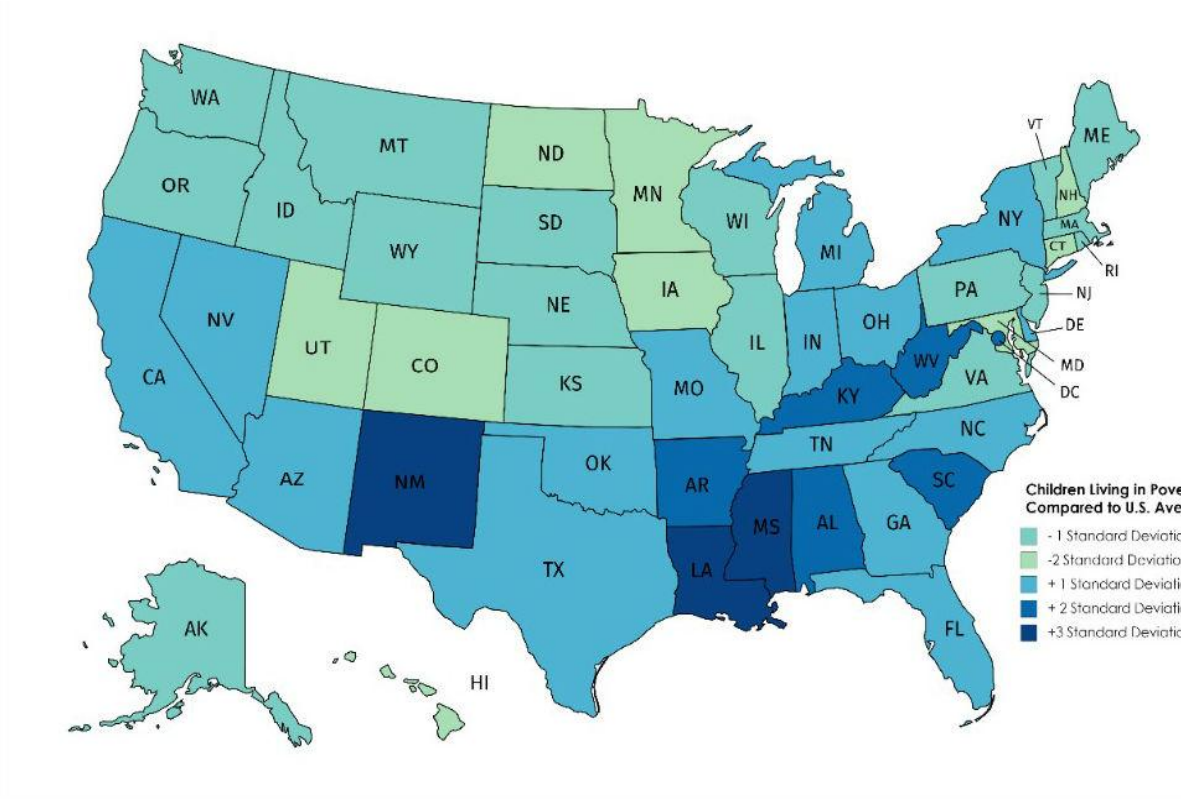

**Education Expenditures and Low-Income Students**

To discover how state education spending affects low income students specifically, it is necessary to take a closer look. The average child poverty rate in the United States is 17.57 percent (Children's Defense Fund, 2018). The highest rates of poverty occur in Louisiana (28 percent), New Mexico (27.2 percent), and Mississippi (26.9 percent). All three of these states spend below average per pupil—Louisiana, at $9,462, and New Mexico, at $8,956, fall within one standard deviation, but Mississippi, at $7,213, falls two standard deviations below

the U.S. average of $10,755. These three states also report scores in reading and mathematics that are significantly below the national average.

**Figure 4**

*Children Living in Poverty Compared to U.S. Average*




Even in states with lower poverty rates, there is a gap between low-income students and their more wealthy peers. In fact, such test score gaps can be observed in every state. On the Grade 4 mathematics test, the average gap between students who are eligible for the National School Lunch Program and those who are not is 23 points. The smallest gaps come from Wyoming and West Virginia, at 15 points, and the largest in the District of Columbia and Maryland, at 38 and 30 points, respectively (State Student Group Scores and Score Gaps, Mathematics, 2017). The same can be observed with the Grade 4 reading test, but the gap is

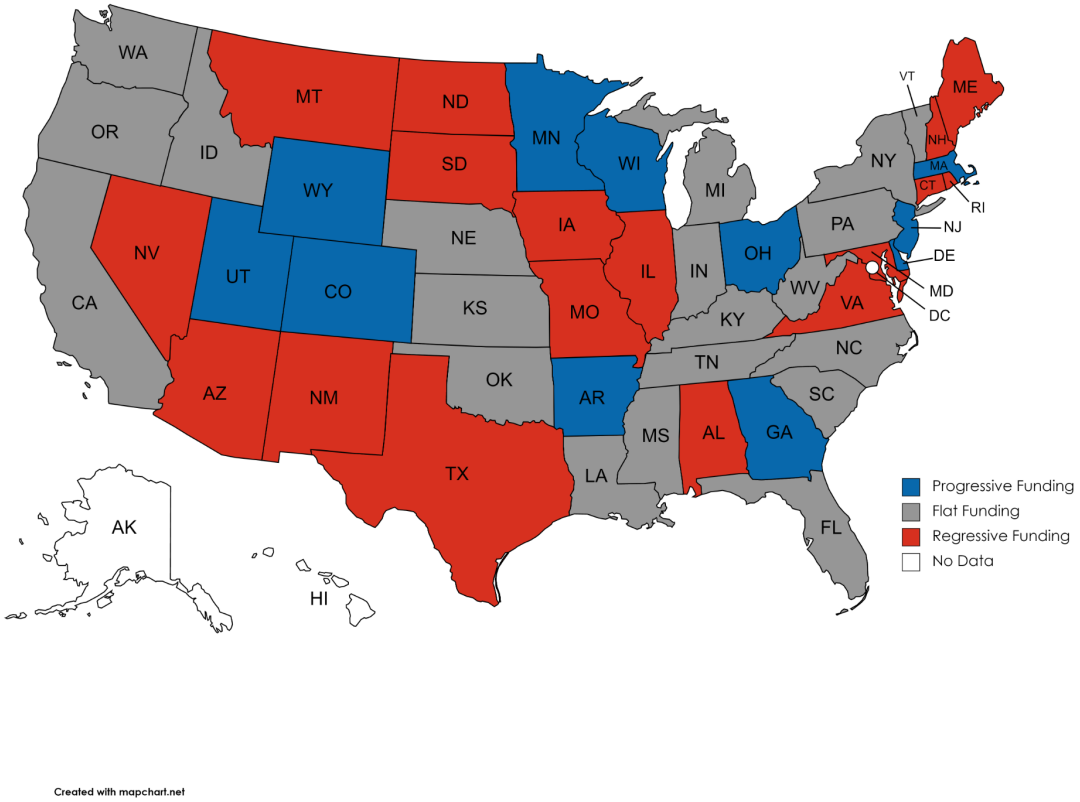
larger, with an average difference of 27 points. Wyoming again records one of the lowest gaps, along with North Dakota, at 19 points. Similarly, the District of Columbia again has the biggest gap, at 41 points, with the next largest being Alaska at 32 points (State Student Group Scores and Score Gaps, Reading). Why do low-income students score consistently lower than their wealthier counterparts? And why do some states, like Wyoming, have smaller gaps?

School systems depend on federal, state, and local funding to cover educational costs, though most of the funding comes from state and local sources. For example, in the Charlotte-Mecklenburg school system, over half of the district's per-pupil funding (62.34%) comes from the state of North Carolina, with 21.17% coming from local sources and just 10.5% coming from the federal government (Charlotte Mecklenburg Schools, 2018). Most school districts in the country are quite similar. This means that the funding available is greatly dependent on revenues such as property taxes. These vary greatly from state to state, and in states with higher property taxes and more accumulated property wealth, more revenue can be drawn. States in New England, such as Massachusetts and Connecticut, rely more on revenue from property taxes, and in those states, property taxes are higher, meaning they have more money available for educational expenditures. Within these states, districts with higher property taxes, and by extension, wealthier families, will have more money available for their students, whereas other districts with lower property taxes and more low-income families will have less money and will be less capable of providing additional funds to their students. This means that these districts will rely on the state to provide the funding they need.

The Education Law Center and the Rutgers Graduate School of Education published a report entitled *Is School Funding Fair?* in February 2018 which examined various measures of school funding across the country, including funding distribution. Funding distribution refers to how money is allocated based on need (i.e., poverty). The report classified states as progressive "if high poverty (30%) districts receive at least 5% additional funds over low poverty (0%) districts" (Baker et al., 2018, p. 9). Regressive states provide high poverty districts with 5% less funding than low poverty districts, and flat states fall somewhere in between. They found only 11 progressive states, but 20 flat states and 17 regressive ones. Utah, Delaware, and Minnesota were ranked as the most progressive, with low-income students receiving 30% more funding than wealthier students. According to the 2017 National Report Card, Utah and Delaware report below-average gaps between low-income and wealthier peers, and Utah and Minnesota report above average test scores (State Student Group Scores and Score Gaps, Mathematics, 2017; State Student Group Scores and Score Gaps, Reading, 2017). The most regressive states—Nevada, Illinois, and North Dakota—provide their low-income students less than 75 cents for every dollar their wealthier peers receive. Illinois reports greater than average gaps between low-income and wealthier students. While Nevada's gap is smaller, they report test scores below the national average in both reading and math.

**Figure 5**

*Classification of State Funding for Education*




Though providing progressive funding is a solid step, there is still work to be done. Not all states who provide progressive funding have testing gaps below the national average. This could be a result of insufficient funding overall; if there is not enough money in the first place, there will not be enough money to provide the supports that low-income students need to learn and score at the same level as their wealthier peers. It is important to note that these supports are not needed because of any inherent deficits in low-income students, but because students from wealthier backgrounds tend to have access to more resources such as preschool, books, and tutors, which give them an advantage in school.

At the district level, there can be great disparities in school funding. This comes partially as a result of income segregation. Owens, Reardon, and Jencks found that there was

an increase between 1990 and 2010 in income segregation with the lower middle class becoming more separated from the upper middle class and the more affluent (2016). Parents with more wealth have the ability to choose where to live based on the schools in the area. They also have the choice to send their children to private or charter schools if they are not satisfied with the schools in their area. Low-income parents, on the other hand, do not often have these opportunities. Though charter schools may offer open lotteries, they often do not provide transportation, and this can be an obstacle to low-income families. High levels of income segregation bring a risk of lowered political support for public education. This is because wealthier families tend to have greater political influence, and they may be hesitant to campaign for increased funding in other districts (at the state level) if their district has adequate funding. In addition, wealthier families who do not use public schools in their district may not advocate for increased funding in their own district, as they and their children receive no benefit.

When middle and upper class families choose to leave a district or not enroll their children in traditional public schools, low-income children are often left in the local public schools with few peers of other classes. These schools tend to have fewer instructional resources, less rigorous curricula, and teachers with fewer formal qualifications (Owens et al., 2016). This echoes a pattern from the past—low-income students relegated to vocational tracks and not allowed to pursue college preparatory classes.

**Education Expenditures and Resources**

Another variable to consider are resources—what additional funding can buy. Most standardized tests are written by one of three companies: CTB McGraw Hill, Houghton

Mifflin Harcourt, or Pearson (Broussard, 2014). These companies also sell textbooks that are incredibly similar to the tests. It was even found that Pearson once published a reading passage verbatim from their textbook onto a standardized test. This matters because standardized tests draw from a specific fountain of knowledge. Students who learn with a book that is tailored to the test will be more prepared to answer test questions in the way graders want them to.

In the 2012-2013 school year, Philadelphia public schools were allotted $30.30 per student to buy textbooks. With most textbooks running $100 and up, this amount of money is woefully inadequate. Textbooks do not have to be replaced every year, but do have to be replaced with curriculum or test changes, which happen frequently. Philadelphia's public school students are overwhelmingly poor, with 79 percent qualifying for free or reduced-price lunch (Broussard, 2014). While Pennsylvania as a whole spends more money per student than the U.S. average and boasts higher test scores, they are ranked as a C in terms of funding distribution and allot less than $300 more per student to high-poverty schools. This means that low-income schools may not have the funding needed to supply additional resources or the textbooks that cater to the test, while other schools or districts may be able to, with additional local and parental funding. Though standardized tests do not measure all of a student's learning, they are the mark on which schools and teachers are generally graded and on which students are promoted or assigned to differing levels of classes.

Low-income schools and students are challenged by their lack of resources. Further, when schools fail to show improvement on standardized tests, increased pressure is placed on

them. This often leads to schools putting emphasis on tested subjects and leaving others behind.

## Arts Programs in Public Schools

Often, arts programs and budgets are slashed to allow more time and money for reading, math, and science. This trend can be noted in all schools, not just low-income ones. Following the passage of the No Child Left Behind Act in 2002, the greater emphasis on math and reading meant funds were redirected. More time and money were spent on those subjects that required standardized tests. This was exacerbated following the Great Recession in 2008-2009, as schools across the country faced budget cuts. Arts programs were the first to be cut, and dance and theatre programs were hit the hardest. In the 1999-2000 school year, 20 percent of schools offered dance or theatre classes, but by 2009-2010, this number had dropped to three percent for dance and four percent for theatre (Metla, 2015).

Even though arts programs were cut across the board, low-income and minority students were still the most affected. Arts programs for these groups had been declining since the early 1990s, and the cuts of the 2000s meant slicing away programs that barely existed in the first place. In 2008, for example, prior to the budget cuts of the Great Recession, African-American and Hispanic students were two times less likely to have access to arts programs in their schools, in comparison to their white peers (Metla, 2015). For these students in schools marked as low-performing, this would continue to decline. Schools that consistently failed to meet adequate yearly progress (AYP) goals were placed in "program improvement," which often led to further cuts to arts programs. Schools in more affluent

areas were often able to dodge cuts as a result of private funding and parental donations, but low-income schools were rarely afforded this luxury.

Focusing in on time spent in art classes each week, teachers report that while some schools may not offer separate dance and theatre classes, it is often incorporated into classroom lessons. While only three percent of elementary schools in the 2009-2010 school year offered instruction specifically designated for dance, 44 percent offered it as part of the school's physical education program (Parsad, Spiegelman, & Coopersmith, 2012). This often comes in the form of square dance or other group dance lessons. With a closer look, however, a familiar pattern appears—schools with the highest concentrations of poverty were the least likely to report integration of dance into other subject areas.

Classroom teachers also report school curricula have been narrowed as a result of increased testing pressure. In a survey by the Farkas Duffet Research Group, 81 percent of teachers indicated they believe other subjects—such as history and the arts—are being left out because of the extra attention given to math and language arts. Although teachers from struggling schools—those that failed to meet AYP goals in the 2009-2010 school year—were more slightly more likely to voice this opinion, 57 percent of all teachers agreed that in order to meet AYP goals, low-income and minority students were often shortchanged in music, art, and literature (Farkas Duffet Research Group, 2012).

**Participation in Arts Outside of School**

Outside of school, many children engage in art classes and clubs. The US Census Bureau, in its 2011 A Child's Day survey, asked parents to report whether their children participated in sports, clubs, lessons, or all three. While this did not specifically single out art

programs, these most likely fell in the lessons category. Overall, 30 percent of children ages 6 to 11 were reported as participating in lessons (U.S. Department of Education, National Center for Education Statistics, 2011). The data were also disaggregated according to several characteristics, including monthly family income, poverty status, and region of residence.

When looking at monthly family income, there was a large gap in participation between children whose families made less than $1,500 per month and those whose families made $6,000 or more per month. Only 19.3 percent of children from the poorest families participated in lessons, compared to 42.3 percent of those from the wealthiest families—a gap of 23 percent. This pattern can be observed when looking at poverty status as well. Among children below the poverty level, 19.6 percent were reported as participating in lessons. That number jumps almost 20 percent for children who live 200 percent or more above the poverty level (U.S. Department of Education, National Center for Education Statistics, 2011). Thus, it appears that low-income children rely more on in-school lessons to take the place of out-of-school lessons.

**Figure 6**

*Percent of Students Participating in Lessons by Monthly Income*

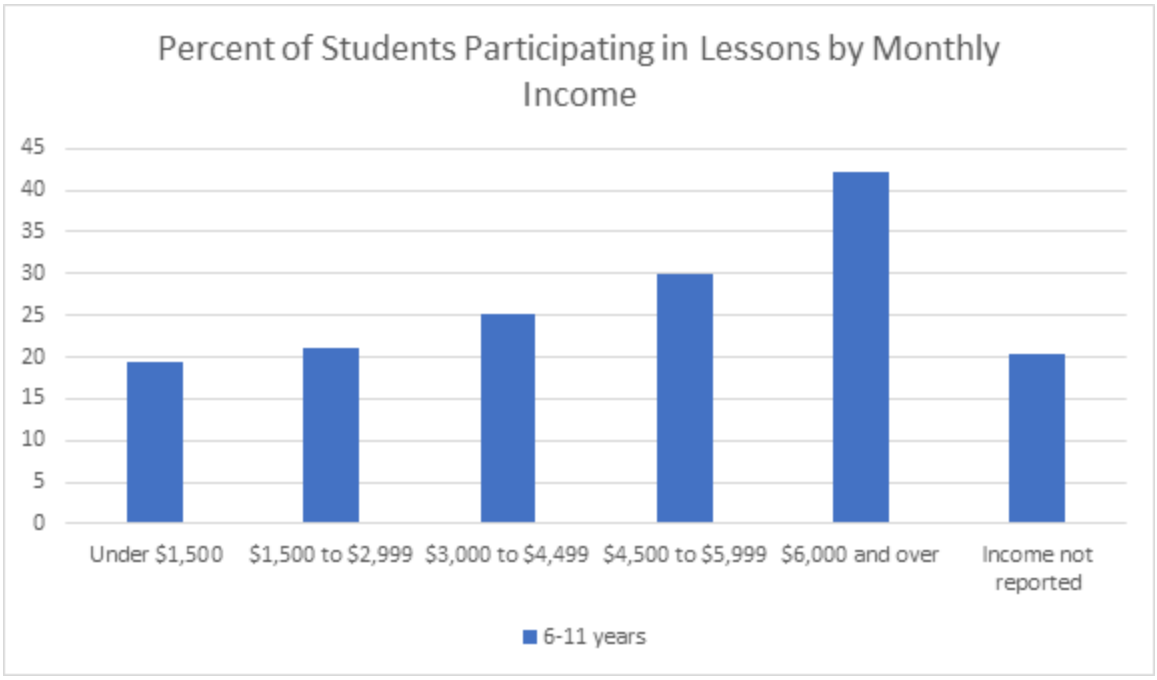
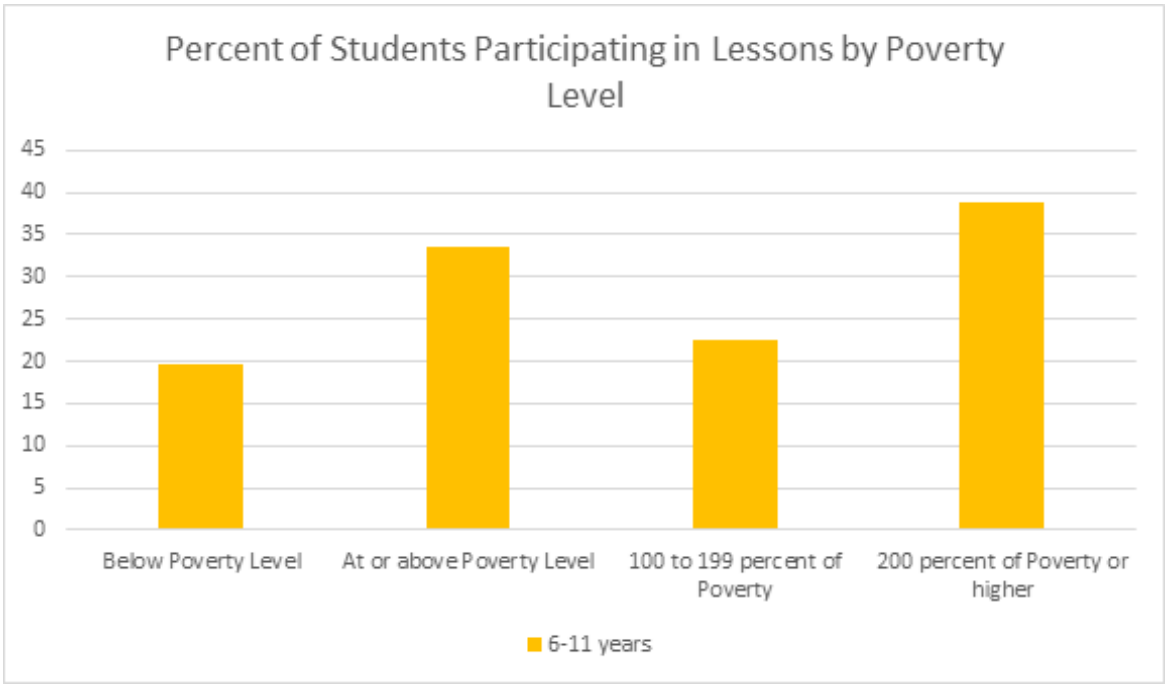



**Figure 7**

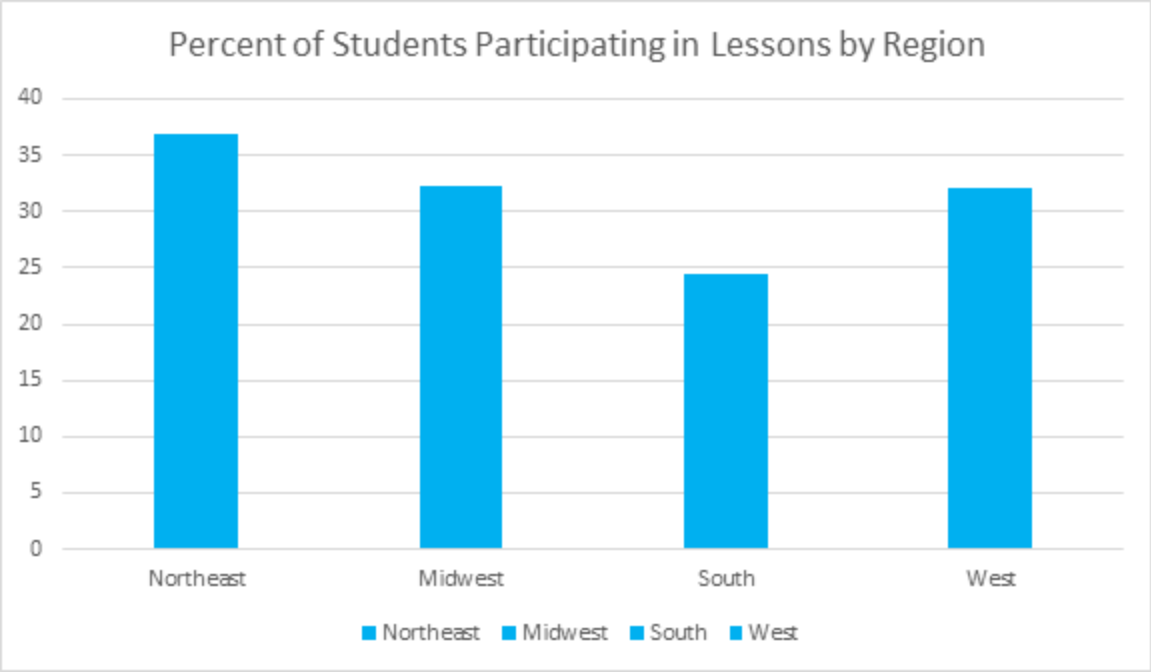
*Percent of Students Participating in Lessons by Poverty Level*



Another interesting pattern centers on a child's region of residence. Children in the South were least likely to participate in lessons, falling approximately seven percent lower than the next lowest region, the West (U.S. Department of Education, National Center for Education Statistics, 2011). This is alarming, because as noted earlier, states in the South tend to spend much less on education than those in other areas of the country. This means that less money is available for arts programs, which may decrease their availability in schools. Compounding this is the fact that poverty is more concentrated in the South. All of this taken together seems to indicate that low-income students in the South face a higher risk of missing out on arts education.

**Figure 8**

*Percent of Students Participating in Lessons by Region*




**Benefits of Arts Education**

Why is arts education necessary? Most children will not pursue a career with explicit connections to the arts. However, there is extensive research that shows connections between arts instruction and improved academic performance, amongst other benefits. Beyond improvement in core subject areas, students who took four years of art classes scored 91 points higher on their SAT exams than those taking only a semester or less (Metla, 2015). For young children, the arts provide developmental benefits. For example, in visual arts classes, students work with paint brushes and scissors, allowing them to practice and develop necessary motor and dexterity skills. Language skills are also built as children learn colors, shapes, and descriptive words. Music, both in music and dance classes, helps connect both hemispheres of the brain, resulting in improvements in communication and listening skills (Metla, 2015). Inventiveness is also enhanced through art classes—through the different arts mediums, children are encouraged to express themselves and take risks. This allows them to develop a sense of innovation, which helps them be creative and problem-solve in their adult lives. According to Americans for the Arts (2013), 72 percent of business leaders indicate that creativity is the top skill they seek when hiring, suggesting a need for children to build it early in life.

### *Benefits of Arts Education for Low-Income Students*

Arts education holds additional benefits for those who receive it the least—low-income students. At the base level, arts programs can provide a safe haven for those who lack safety at home and can give students an incentive to stay in school. In fact, low-income students who do not take art classes are five times more likely than their peers to drop out of high school prior to graduation. Their peers who are involved in the arts have

higher college enrollment rates and are three times more likely to earn Bachelor's degrees (Catterall, Dumais, & Hampden-Thompson, 2012).

While very little causal evidence exists, many correlational studies have linked arts education to beneficial outcomes for low-income students. One looked at low-income eighth grade students and found that those with high levels of arts engagement in elementary school reported higher test scores in science and writing (Catterall et al., 2012). This did not completely close the testing gap between low-income students and their wealthier peers, but arts-engaged students scored closer to the average than their non-engaged low-income peers. Among low-income adults, 50 percent of those who had a richer background in the arts anticipated gaining a job in a professional career. Only 21 percent of adults of the same socioeconomic status but with less arts experience reported the same (Catterall et al., 2012). This may indicate that arts involvement contributes to class mobility, as those in professional careers tend to have higher salaries.

One study that involved an experiment looking into the causal relationships between arts programs and academic achievement is the Houston Arts Program. This program sought to research causal relationships between arts programs and low-income students by randomly selecting low-income schools to participate in an arts enrichment program. Their research revealed that students in the arts enrichment schools scored 0.13 of a standard deviation higher on writing tests than students in the control (non-arts enrichment) schools. Students in the arts schools also saw a 3.6 percent decrease in disciplinary infractions and a 0.08 of a standard deviation increase in compassion for others (Bowen & Kisida, 2017).

The study also found specific benefits amongst Limited English Proficiency (LEP) and Gifted and Talented (GT) students. LEP students are sometimes, but not always, of lower income than their peers. In addition, they often have lower scores on standardized tests as a result of their limited English skills. This may result in discouragement, especially in low-income schools with a strong focus on test scores. The Houston Arts Program observed an increase in college aspirations among LEP students engaged in arts enrichment (Bowen & Kisida, 2017). This indicates that arts programs might help students reconnect to school and may encourage class mobility, as those with college degrees tend to hold higher salaries than those with only high school degrees.

## Dance Programs and Low-Income Students

Arts programs as a whole show benefits to all students and especially low-income students. Of the arts programs provided, one of the least frequent is dance. Dance classes have been removed from many schools, often due to budget cuts. Although some children choose to take these classes outside of school, dance can be a very restrictive art form. Dance classes tend to be expensive for families, as parents must shoulder tuition costs as well as the cost of shoes and costumes. Thus, dance classes are often out of reach for low-income families.

### Benefits of Dance Education

Very few experimental studies have been conducted on the impact of dance on academics, but one study by Ruppert (2006) found that students who studied dance scored higher than those who did not on measures of creative thinking, including abstract thought.

This may assist students as they advance in their studies, as much of higher education requires thinking abstractly.

Research on the benefits of dance in neuroscience has revealed that “through movement, sensory input, and repetition with novelty, the brain can create new neurons and neural pathways" (Gilbert & Houck, 2019, p. 5). All three of these are integral parts of dance; all dance disciplines move in some way, dance is often set to music (auditory input), and dance sometimes uses props and costumes (visual and tactile input). Finally, dance often requires the repetition of steps. For example, in ballet classes, students will generally perform the same steps during their warm-ups; however, the order and frequency may be changed, inserting novelty into the repetition. Further, research shows that movement stimulates brain-derived neurotropic factor (BDNF), a protein responsible for keeping brain cells both functioning and growing as well as for stimulating the growth of new neurons (Gilbert, 2019). Dance can thus help students’ brains develop, which in turn will help them as they learn.

Other research on how dance helps mental development has found that because dance is language-like and communicates ideas, feelings, and stories, it helps students’ minds to grow as if they were learning a verbal language. Additionally, because dance is a method of communicating, it uses the same brain processes used for speaking and writing (Hanna, 1999). In essence, when dancing, students are producing language. This can be a great help to students, especially English Language Learners (ELLs), as it gives them the ability to communicate and express themselves through their body rather than English (Toppen, 2019). When learning someone else’s choreography in dance, students engage the right hemisphere

of their brain because they are learning a specific pattern. But dance also involves the left hemisphere—when students analyze each others' dances for meaning, they use this side of the brain.

## Dance in Schools

### *Dance as a School Program*

Some public schools have dance programs within the school. Ashley River Creative Arts Elementary School in Charleston, South Carolina, is a public arts magnet serving grades kindergarten through fifth. Students receive arts instruction daily in a variety of disciplines, including dance and classical ballet. Five years after the implementation of this program, the school was ranked second highest academically in the Charleston public school system. Additionally, their test scores in science, language arts, math, and social studies are now consistently 10-20 points above local and state averages. While some of this success is possibly due to the presence of other art forms, other schools with dance programs echo the success. Virgin Islands Elementary School, for example, saw their standardized test scores increase from failing to 83 percent in just two years of including a dance program in their school (Hanna, 1999).

Partnering with community programs is another viable avenue for including dance in schools. In the New York City Public Schools, a community program called ArtsConnection Young Talent Dance Program exposes young students to dance. The program begins in the third grade, in which all third grade students and their teachers take an introductory class. The teachers from ArtsConnection teach a weekly class on dance basics for five to 10 weeks and then hold auditions to identify which children would benefit from continuing their dance

education. The accepted students take weekly classes in fourth grade for 25 weeks. During this time, they also take field trips to attend master classes at studios in the community. The final two years of the program—fifth and sixth grade—are filled with classes at school and at studios in the community. Students in the program are expected to follow the ArtsConnection standards of attendance, dress, and discipline—if students do not arrive in clean dance clothes they receive an absence; students are dropped from the program after three absences. Through this, ArtsConnection strives to cultivate responsible and disciplined dancers (Hanna, 1999).

The National Dance Institute (NDI) provides a similar program in New York City and in New Jersey City. Their program specifically targets underserved students—90 percent of the students come from underprivileged communities. NDI operates a 30 week program for all fourth, fifth, and sixth grade students at the schools they serve. This program focuses on freestyle jazz and also includes a theme that is incorporated into the students' classroom learning. For example, one such theme was "Paul Revere's Ride" and teachers received curriculum guides to help them follow this theme while students prepared dances for it (Hanna, 1999). Like ArtsConnection, NDI selects certain students to continue their dance education. At NDI, this takes the form of classes every Saturday morning for three to five hours, named the SWAT Team—Scholarships for the Willing, Achieving, and Talented (National Dance Institute, 2019). From there, students can continue on to other programs, including summer dance intensives.

While little causal evidence exists for the success of these programs, NDI administers surveys to participating teachers each year to glean their perspective on how the program

impacted their students. On recent surveys, NDI found that 97 percent of participating teachers noted that their students gained self-confidence and an enhanced ability to work cooperatively. Additionally, 91 percent believed that students demonstrated self-discipline, perseverance, concentration, and focus while participating in NDI classes and performances (National Dance Institute, 2019). A participating principal echoed this sentiment, noting that "most important is that ingredient which helps students succeed in school—persistence in trying to do your best." (Hanna, 1999, p. 117). NDI also interviews students years after they participate in the program to gather their opinions on the program and its impact on their lives. Most noted that the program helped them gain confidence. For example, Ben Nathan, who participated in 1997, stated in 2018 that the program helped him find his passion for tap dance and "fed [his] self-confidence and belief in [his] own ability to make a difference in the world" (National Dance Institute, 2019). Another student, Alex Yuan Nicholson, noted "when you are a public school kid from a low-income community like I was, there are not many opportunities like this...I learned from NDI that most things worth fighting for aren't easy" (National Dance Institute, 2019). Nicholson's comment aligns with the U.S. Census data showing that children living in poverty are less likely to participate in extracurricular lessons, such as dance (U.S. Department of Education, 2011). Additionally, while these comments do not directly connect dance programs with increased academic success, the values instilled by programs such as NDI may help students in school. When students learn that with hard work, they can grow and accomplish great things, they are more motivated to try harder. This type of outlook aligns with a growth mindset, one in which both students and teachers believe that anyone can grow and learn, that intelligence is not set in stone. When

students have a growth mindset, they are less likely to have behavioral problems and more likely to succeed in school. However, it is important for teachers to actively promote the growth mindset and connect their students' efforts to learning. As Carol Dweck says, "effort is key for students' achievement, but it's not the only thing" (Dweck, 2015, para. 5). Dance programs, beyond their neurological benefits, may instill values in students that can help them in school, but they must be drawn on by teachers in order to help students grow.

Students can experience the benefits of dance outside of structured dance programs. In structured programs, children usually study different disciplines of dance—ballet, tap, jazz, modern, hip hop, and others—with a focus on technique. Dance education in schools, however, often takes a different approach. Here dance is creative movement—teachers include dance as movement breaks or use dances that have an educational component. Websites such as GoNoodle provide pre-made dances corresponding to pieces of curricula for teachers to use.

Including dance more than this can be a complex proposition, though. Teachers, especially in younger grades, are already responsible for several subject areas and are required to fit a lot of material into a short amount of time. One solution to this lies in discovering what can be taught through dance—thinking about how dance can be used to enhance the teaching and learning of non-dance standards. An example comes from Lincoln County, North Carolina. Here, dance teachers asked their students to think of the classroom as a map. The students were then asked to plan "trips" to four cities. In order to get to their cities, they created movements to represent different kinds of transportation, such as cars and trains (Hanna, 1999). A dance activity such as this corresponds to various North Carolina

Social Studies standards on geography and maps (NC DPI, 2019). Dance can also be used in mathematics—students can use their bodies to represent shapes and lines. For example, the Common Core Mathematics Standards for kindergarten require that students be able to create shapes—one such standard suggests they build shapes from sticks and clay, but this could easily be changed to have students make shapes with their arms, legs, and fingers (Common Core State Standards Initiative, 2020, para. 5). Finally, dance can assist students in creating their own stories. Common Core Standards for Grade Three require students to "write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences" (Common Core State Standards Initiative, 2020, para. 11). In this, they must develop a plot, characters, and descriptions. Having students dance their story before, during, and after writing can help students in visualizing their thoughts.

Outside of academic skills, dance can help students develop interpersonal skills. These skills are developed when students choreograph for each other. The choreographic process necessitates working with others, as the choreographer must direct their dancers. The choreographer must develop and use time management skills; they must have the choreography ready when working with dancers and must be able to navigate teaching the choreography in the allotted time. Finally, both the choreographer and the dancers must work successfully with others in order to practice a piece to be performed; collaboration is necessary (Hanna, 1999).

Dance can thus be used in schools to help students grow their interpersonal skills and confidence and explore the curriculum in different ways. Structured programs can be used,

especially with the help of community partners, or dance can be incorporated into the classroom by teachers. Any way it is used, dance holds a myriad of benefits for students and teachers alike.

## Conclusion

Today, low-income children who attend public schools in the United States often attend under-funded schools. These schools generally have failed to meet progress goals and are threatened with consequences from the government if they continue to not meet the goals. As such, these schools often have programs cut that do not directly pertain to academic progress, including arts programs. However, the arts hold many benefits for students, including increased motivation and in some cases, increased academic performance. Students who are more motivated are more likely to attend school regularly and finish school, and low-income students engaged in the arts have been found to have lower high school drop-out rates and higher rates of earning Bachelor's degrees than their peers who do not participate in the arts (Catterall et al., 2012). In the lower grades, correlational studies have shown that students who participate in arts programs have higher test scores in science and writing (Catterall et al., 2012). While these may not close the achievement gap between low-income students and their more affluent peers, they can assist in shrinking it.

Dance holds enormous potential for low-income schools. As earlier noted, low-income students at higher-income schools performed significantly better than their peers at low-income schools (Schwartz, 2012). This suggests that if something is changed at low-income schools, the low-income students there would have the opportunity to enhance their achievement, just like their peers at higher-income schools. Dance could be such an

enhancement. Dance provides many neurological benefits, including spurring the growth of new neurons (Gilbert, 2019), which aids in learning. Other causal evidence is difficult to find, but anecdotal and correlational evidence suggest that dance can be used across various disciplines to help students visualize their learning, connect with each other and build community, and express themselves. Notably, dance in schools can also be very inexpensive; the styles of dance most studied and correlated with positive growth in students require little equipment. Modern dance in particular has great benefits for students, as it allows them to communicate using their body and not words. Students do not need particular shoes or clothing for modern dance or a particular kind of floor, making it easy to include in schools and classrooms. Thus, with the help of community programs or even teachers at the school, dance can be brought to low-income students at little or no cost. This alleviates the burden not only on the students' families but also on the school itself; schools in low-income areas rarely have additional funds to invest in programs that are not strictly academic.

Introducing dance in low-income schools can be an inexpensive way to give attending students a varied curriculum that will assist them in learning and growing in multiple areas—cognitively, physically, emotionally, and socially. Dance can support the growth of the whole child and improve the educational experience and success of low-income students and schools.

**References**

Americans for the Arts. (2013). *Arts Education for America's Students: A Shared Endeavor*. Washington, D.C.: Americans for the Arts.

Americans for the Arts. (2013). *Arts Education Navigator*. Washington, D.C.: Americans for the Arts.

Baker, B. D., Farrie, D., & Sciarra, D. (2018). *Is School Funding Fair? A National Report Card* (7th ed.). Newark, NJ: Education Law Center.

Baker, B. D., Weber, M., Srikanth, A., Kim, R., & Atzbi, M. (n.d.). New Brunswick, NJ.

Bonbright, J., Bradley, K., & Dooling, S. (2013). *Evidence: A Report on the Impact of Dance in the K-12 Setting* (pp. 1-56, Rep.) (S. Barr & L. Provost, Eds.). Silver Spring, MD: National Dance Education Organization.

Bowen, D. H., & Kisida, B. (2017). The art of partnerships. *Phi Delta Kappan*, *98*(7), 8–14. doi: 10.1177/0031721717702624

Bowen, D. H., & Kisida, B. (2019). *Investigating Causal Effects of Arts Education Experiences: Experimental Evidence from Houston's Arts Access Initiative* (4th ed., Vol. 7). Houston, TX: Kinder Institute for Urban Research.

Brennan, P. (2001, September 02). 'School: The Story of American Public Education'. Retrieved November 5, 2019, from https://www.washingtonpost.com/archive/lifestyle/tv/2001/09/02/school-the-story-of-american-public-education/6f6c1f5f-e479-4f9a-806a-e156258a5968/

Brenner, B., & Williams, J. (2000). *If you lived in Williamsburg in Colonial Days*. New York City, NY: Scholastic Inc.

Broussard, M. (2014, July 15). Why Poor Schools Can't Win at Standardized Testing. Retrieved October 20, 2019, from https://www.theatlantic.com/education/archive/2014/07/why-poor-schools-cant-win-at-standardized-testing/374287/.

Carter, J. G. (1824). Letters to the Hon. William Prescott, Ll. D., on the free schools of New England, with remarks upon the principles of instruction [HathiTrust]. Boston: Cummings, Hilliard & Co.

Catterall, J. S., Dumais, S. A., & Hampden-Thompson, G. (2012). *The Arts and Achievement in At-Risk Youth: Findings from Four Longitudinal Studies*. Washington, D.C.: National Endowment for the Arts.

Children's Defense Fund. (2018). *Child Poverty in America 2017: State Analysis*. *Child Poverty in America 2017: State Analysis*.

Cohen, L. N. M., & Gelbrich, J. (1999). Module One: History and Philosophy of Education. Retrieved from https://oregonstate.edu/instruct/ed416/module1.html

Common Core State Standards Initiative. (2020). English Language Arts Standards " Writing " Grade 3. Retrieved July 20, 2020, from http://www.corestandards.org/ELA-Literacy/W/3/

Common Core State Standards Initiative. (2020). Kindergarten "Geometry". Retrieved July 20, 2020, from http://www.corestandards.org/Math/Content/K/G/

Cremin, L. A. (2019, July 29). Horace Mann. Retrieved October 8, 2019, from https://www.britannica.com/biography/Horace-Mann.

Dweck, C. (2015). Carol Dweck revisits the growth mindset. *Education Week*, *35*(5), 20-24.

EdSource Staff. (2014, April 8). Effort to revive arts programs in schools gains momentum. Retrieved December 26, 2019, from http://edsource.org/2014/effort-to-revive-arts-programs-in-schools-gains-momentum/63507

Farkas Duffett Research Group. (2012). *Learning Less: Public School Teachers Describe a Narrowing Curriculum*. Washington, D.C.: Common Core.

Gilbert, A. G. (2019). The Body-Brain Connection. In 910490409 716651974 A. G. Gilbert & 910490410 716651974 B. Houck (Authors), *Brain-compatible dance education* (pp. 1-22). Champaign, IL, IL: Human Kinetics.

Hanna, J. L. (1999). *Partnering dance and education: Intelligent moves for changing times*. Champaign (Illinois), IL: Human Kinetics..

Historical Timeline of Public Education in the US. (2006, April 13). Retrieved from https://www.raceforward.org/research/reports/historical-timeline-public-education-us.

Metla, V. (2015, May 14). School Art Programs: Should They Be Saved? Retrieved December 26, 2019, from

https://www.lawstreetmedia.com/issues/education/cutting-art-programs-schools-solution-part-problem/

Mondale, S. & Patton, S.B. (Executive Producers). (2001). *School: The Story of American Public Education*.[TV Series] Stone Lantern Films. PBS.

National Dance Institute. (2019, October 21). Our Impact. Retrieved August 13, 2020, from https://nationaldance.org/about-ndi/our-impact/

New York Free School Society, 1805. (n.d.). Retrieved from https://www.encyclopedia.com/history/news-wires-white-papers-and-books/new-york-free-school-society-1805.

Owens, A., Reardon, S. F., & Jencks, C. (2016). Income Segregation Between Schools and School Districts. *American Educational Research Journal*, *53*(4), 1159–1197. doi: 10.3102/0002831216652722

Parsad, B., Spiegelman, M., & Coopersmith, J. Arts Education in Public Elementary and Secondary Schools, 1999-2000 and 2009-10, Arts Education in Public Elementary and Secondary Schools, 1999-2000 and 2009-10 (2012). Washington, D.C.: U.S. Department of Education.

Schwartz, H. (2012). *Housing Policy Is School Policy: Economically Integrative Housing Promotes Academic Success in Montgomery County, Maryland*. New York City, NY: The Century Foundation.

State Performance Compared to the Nation, 2017 Grade 4 Mathematics. (2017). Retrieved September 17, 2019, from https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=MAT&sj=&sfj=NP&st=MN&year=2017R3.

State Performance Compared to the Nation, 2017 Grade 4 Reading. (2017). Retrieved September 17, 2019, from https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=RED&sj=&sfj=NP&st=MN&year=2017R3.

State Student Group Scores and Score Gaps, Mathematics. (2017). Retrieved October 5, 2019, from https://www.nationsreportcard.gov/math_2017/states/gaps/?grade=4.

State Student Group Scores and Score Gaps, Reading. (2017). Retrieved October 5, 2019, from https://www.nationsreportcard.gov/reading/states/groups/?grade=4.

Taie, S., & Goldring, R. Characteristics of Public and Private Elementary and Secondary Schools in the United States: Results From the 2017-18 National Teacher and

Principal Survey First Look, Characteristics of Public and Private Elementary and Secondary Schools in the United States: Results From the 2017-18 National Teacher and Principal Survey First Look (2019). Retrieved from https://nces.ed.gov/pubs2019/2019140.pdf

Toppen, M. (2019, August 12). Using Dance to Promote SEL Skills. Retrieved December 31, 2019, from https://www.edutopia.org/article/using-dance-promote-sel-skills

U.S. Department of Education, National Center for Education Statistics. (2011). Table D14. Extracurricular Activities of School Age Children - Characteristics of Families and Households with Children Age 6 to 17: 2011. In U.S. Department of Education, National Center for Education Statistics, A Child's Day: 2011. Retrieved from https://www.census.gov/hhes/socdemo/children/data/sipp/well2011/tables.html