Good afternoon Chairwoman Korry and Members of the Committee. Thank you for your invitation to participate in this hearing.

My name is Peter Cookson and I am a Senior Researcher with the Learning Policy Institute (LPI). The Institute conducts and communicates independent, high-quality research to improve education policy and practice. Working with policymakers, researchers, educators, community groups, and others, we seek to advance evidence-based policies that support empowering and equitable learning for each and every child.

I am honored to be here today.

**Investing in Student Success**

Investing in the success of each and every student requires a commitment to adequate and equitable funding if the deeply held American belief in equality of educational opportunity is to rise above the level of cliché and become a living reality. Inadequate funding and disparities in the distribution of those funds at the district and school levels directly impacts the opportunities students have to learn. This issue is of urgent importance both in New York and nationally—and to the students sitting in classrooms at this very moment.
At the request of the Committee, this testimony specifically addresses the question of whether New York State’s approach to education financing, and specifically the Foundation Aid formula and its various add-ons, negatively impacts the learning opportunities of students from low-income families and students of color.

The Foundation Aid formula is one of the most progressive in the country in terms of its aspirations for the equitable distribution of educational resources. Unfortunately, because it is currently underfunded, and because wealthy local districts can add on much more funding from their local property tax base, the actual distribution of revenue to schools is “regressive.” It is highly unequal, and it does not ensure that funding is related to pupil needs. As a result, high-need school districts serving students of color from low-income families do not have the resources they need to enable and empower their students to reach their academic and creative potential.¹

These disparities in funding have a direct impact on the learning opportunities of those children for whom education is their best hope for developing their talents and maximizing their contributions to New York’s economy and civic culture.

Today, I will share research that explores the relationship between school funding levels and student outcomes, share data related to the distribution of funding in New York State and its impact on the educational opportunities for students of color, provide an example from another state that has leveraged school funding reforms to improve student outcomes, and conclude with recommendations to help ensure that all students in New York receive a sound basic education.

Money Matters in Education

Adequate and equitable funding is the bedrock of an effective, efficient, and just system of public schools. Yet at times, the discussion of school finance can seem confusing, abstract, or distant from the lives of students, teachers, families, and communities. Further, this discussion unfortunately has often been sidetracked by a debate over whether school spending impacts student academic outcomes.² The debate should be over. Newly available data sets and methodologically sophisticated statistical approaches show money spent well has a direct positive impact on student outcomes and life-long success.³
For example, a recent study examined the long-term outcomes for more than 15,000 children born between 1955 and 1985 who were followed through 2011, linking data about their school experiences and life outcomes to that of school spending and school finance reforms. For students from low-income families who had 20% more spent on them over 12 years of school, graduation rates increased by 23 percentage points, their household income as adults increased by 52%, and their odds of living in poverty were nearly eliminated.4

This finding is not exceptional; a national study found that there is a strong relationship between state school finance reforms and graduation rates. Seven years after the reforms, the poorest districts showed an average 12% increase in per-pupil spending and increases in graduation rates of between 6 and 12 percentage points.5 Another national longitudinal analysis found that states with greater overall investment in education resulting in more intensive staffing per pupil tend to have higher outcomes for children from low-income families, higher performance in schools serving children from low-income families, and smaller disparities between schools serving children from low-income families and schools serving more advantaged populations.6

Many state studies reinforce these findings. For example, Massachusetts climbed to its #1 status in student achievement on the National Assessment of Educational Progress in the 1990s after it enacted school funding reforms that added money for students in poverty, English learners, and those identified for special education—coupled with investments in new standards, assessments, extensive teacher training, and preschool for students from low-income families. This comprehensive approach to funding had positive effects on student performance,7 and the state has maintained its top ranked status for student achievement in all the years since.

A review of the research by Kirabo Jackson found that 92% of state studies showed that increased resources were associated with gains in achievement levels, especially for students from low-income families.8 The weight of the evidence makes it clear that money matters for improving educational outcomes for public school students. Based on the research, Jackson concludes: “The recent quasi-experimental literature that relates school spending to student outcomes overwhelmingly support a causal relationship between increased school spending and student outcomes.”9
How this happens is not a mysterious process. The figure below outlines the relationship between schooling resources and student achievement outcomes.


Funding levels matter; however, how those funds are spent matters equally. Linda Darling-Hammond and other scholars have convincingly demonstrated that money spent wisely results in creating teaching and learning systems that provide excellent education for all students. This means:

- equitable funding focused on pupil needs;
- investments in a stable, diverse, high-quality workforce that is equitably distributed and ensures strong educator training and ongoing support for all teachers and leaders;
- thoughtful standards, curriculum, instruction, and assessments that are well aligned with each other and with the demands of a 21st century society and economy;
- high-quality early childhood education that is widely available and freely accessible to all children from low-income families; and
• supports for children’s health and welfare (food and housing security; before and after school care; and extended learning time where needed).

Thoughtful educators and policymakers do not suggest “throwing money at the problem.” Rather, they encourage sound investments that use a variety of funding sources. In line with this research, New York’s highest court has ruled that all schools must be equipped with the following essential resources in order to provide the opportunity for a constitutionally sound basic education:\footnote{11}

1. Sufficient numbers of qualified teachers, principals, and other personnel.
2. Appropriate class sizes.
3. Adequate and accessible school buildings with sufficient space to ensure appropriate class size and implementation of a sound curriculum.
4. Sufficient and up-to-date books, supplies, libraries, educational technology, and laboratories.
5. Suitable curricula, including an expanded platform of programs to help at-risk students by giving them “more time on task.”
6. Adequate resources for students with extraordinary needs (e.g., at-risk, ELL, students with disabilities).
7. A safe, orderly environment.

All of these conditions must be present for a sound basic education. With this background in mind, we turn to New York for evidence that money matters in ensuring that all of the state’s children receive a sound basic education.

**The New York Story**

It should be said at the outset that the state has made considerable effort to fund its public schools. This is a huge undertaking. There are 733 school districts in New York with 4,447 individual traditional public schools serving more than 2.6 million students from prekindergarten to grade 12. The state spends more than $26 billion annually on its public schools and employs more than 210,000 teachers.\footnote{12} New York, like many other states in the Northeast, is among those
states that spend more per-pupil than the national average as adjusted for regional cost differences: $18,665 compared to a national average of $12,526.\textsuperscript{13}

These efforts are commendable and should not be overlooked. Disparities between school district per-pupil spending in New York, however, are dramatic. In 2015, revenues per pupil varied from less than $15,000 per pupil to more than $70,000 per pupil. (See figure 2 below.) A recent study by Education Trust found the following in 2018:\textsuperscript{14}

- New York ranked 48\textsuperscript{th} out of 50 states in gaps in state and local revenues per student between districts serving the most and fewest students in poverty.\textsuperscript{15}
- New York ranked 44\textsuperscript{th} out of 50 states in gaps in state and local revenues per student between districts serving the most and fewest students of color.\textsuperscript{16}

These disparities affect millions of New York children—51\% of the state’s children qualify for free/reduced price lunch, a standard measurement of low-income and poor children. Twenty-one percent of the state’s children live below the poverty line.\textsuperscript{17} Many of these students live in areas of concentrated poverty where nearly every family is poor. Research finds that districts and schools serving students living in communities of concentrated poverty need greater resources than other districts and schools if they are to provide a sound, basic education for all students.\textsuperscript{18}

These disparities led Ian Rosenblum, Executive Director of the Education Trust-New York, to write:

\textit{The level of school funding and how these resources are invested play a crucial role in student success, which is why it is so troubling that New York continues to rank at the bottom of states when it comes to equitable funding. In this context, the upcoming state budget provides a key opportunity to simultaneously address two equity challenges: increasing investment in the school districts that need the most support and ensuring that these resources reach the schools that enroll the largest share of low-income students and students of color.\textsuperscript{19}}

In other words, average per-pupil spending data may camouflage serious funding inequities. And these disparities result in students from low-income families and students of color being
educationally short-changed. This is not news. Like the rest of the country, money matters in New York.

Earlier I noted a number of national studies showing the positive relationship between school funding and student achievement. A recent study focused solely on New York uncovered the exact same relationship—increased funding is associated with higher student achievement in both math and English, even after controlling for many other factors that typically influence school performance. After studying the New York data, the authors conclude, “This study strengthens the case that school resources matter and sustained financial investments can help districts maintain and improve quality of public education.”

While these numbers are informative, they do not always reveal how disparities in resources affect the lives of students, teachers, parents, and communities every day. My research over many years in New York and nationally has focused on the price students from low-income families and students of color pay for attending under-resourced schools. We have, in effect, not one but two public school systems in New York; one for students living in stable communities with sufficient resources to provide a sound basic education and another located in communities of concentrated poverty, which are quite often also communities of color. Students in these communities must struggle mightily to receive a sound basic education.

**Impact on Teacher Quality and Other Learning Resources**

As outlined in figure 1 above, research makes it clear that quality teaching is one of the most important ingredients for ensuring every student receives a sound basic education. A growing body of research across states and countries has shown that teacher qualifications matter for teaching quality and student achievement. For example, an extensive study in North Carolina found that students’ achievement growth was significantly higher if they were taught by a teacher who was certified in his or her teaching field, fully prepared upon entry (rather than entering through the state’s alternative “lateral entry” route), had higher scores on the teacher licensing test, graduated from a competitive college, had taught for more than 2 years, or was National Board Certified. These qualifications were very inequitably distributed, and the researchers found that the combined influence on achievement growth of having a teacher with
most of these qualifications as compared to one with few of them was larger than the effects of race and parent education combined.\textsuperscript{24}

A similar large-scale study of teachers in New York City found that students’ achievement growth in elementary and middle school mathematics was most enhanced by having a fully certified teacher who had graduated from a university-based preservice teacher education program, who had a strong academic background in math, and who had more than 2 years of experience.\textsuperscript{25} Students’ achievement was hurt most by having an inexperienced teacher on a temporary license—a teaching profile most common in high-minority, low-income schools.

When New York City raised salaries significantly in response to a court order, greatly reduced emergency hiring, and took steps to improve teacher retention in high-need schools, the profile of teachers in high-poverty schools shifted substantially, with increases in the proportions of certified, experienced, and better-prepared teachers. Analyses by a team of economists showed that, in combination, improvements in these qualifications reduced the gap in achievement between the schools serving the poorest and most affluent student bodies by 25\%.\textsuperscript{26} Their findings suggest that changing the mix of teachers available to students can influence achievement, and policies which tackle the twin problems of inadequate and unequally distributed teacher quality may help reduce the achievement gap.\textsuperscript{27}

Inequalities in access to qualified teachers are related to lower levels of funding. A study of the distribution of teachers in New York found that salaries for beginning teachers were more than twice as high in some districts as in others, and that these tracked inequalities in funding. (See figure 2).\textsuperscript{28}
Salary disparities, in turn, tracked inequalities in teacher experience and qualifications. The lowest salary districts served greater numbers of students from low-income families and had more inexperienced and uncredentialled teachers, as well as teachers with lower levels of education. Controlling for student and district characteristics, the analysis found that a 1% increase in median-adjusted teacher salaries was associated with a 3% decrease in the proportion of teachers without a permanent credential, a 2% reduction in the proportion of inexperienced teachers, and a 1.5% decrease in the proportion of teachers with lower levels of education (BA+30 or below). Furthermore, teacher qualifications were related to overall student achievement at the district level, both before and after controlling for student characteristics in New York: The percentage of teachers without a permanent credential was significantly related to the proportion of students failing the New York state tests (that is, scoring at a level 1) in
English language arts and mathematics, and the proportion of teachers with master’s degrees was significantly related to the proportion of students scoring proficient on the state tests.

High-need, high-poverty schools especially struggle to attract and retain a certified, experienced, and stable teacher workforce, as the table below indicates.\(^{29}\) Reading from left to right, we see that districts serving low-poverty White students have far fewer teachers teaching out of certification than high-poverty districts serving Black students, far fewer teachers with no or provisional certification, and far fewer inexperienced teachers. The turnover rate of teachers in high-poverty districts serving Black students is double that of low-poverty White districts.

**Table 1**

The Average (Mean) Values of Teacher Noncertification, Inexperience, and Turnover are Greater Among High-Poverty and High-Minority Districts in New York, 2015–16

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Number of Districts</th>
<th>Teachers Out of Certification</th>
<th>Teachers with None or Provisional Certification</th>
<th>Teachers with Fewer Than Three Years Experience</th>
<th>Annual Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low poverty, White</td>
<td>288</td>
<td>1.35</td>
<td>8.98</td>
<td>3.22</td>
<td>8.06</td>
</tr>
<tr>
<td>High poverty, White</td>
<td>317</td>
<td>2.74</td>
<td>12.66</td>
<td>4.89</td>
<td>9.38</td>
</tr>
<tr>
<td>High poverty, Hispanic</td>
<td>73</td>
<td>5.78</td>
<td>17.81</td>
<td>6.72</td>
<td>10.42</td>
</tr>
<tr>
<td>High poverty, Black</td>
<td>36</td>
<td>8.00</td>
<td>21.40</td>
<td>8.69</td>
<td>15.67</td>
</tr>
</tbody>
</table>


A key factor in promoting student success is teacher experience. A recent study that examined 30 studies published within the last 15 years analyzing the effect of teaching experience on student outcomes found that teaching experience is positively associated with student achievement gains throughout a teacher’s career. Gains in teacher effectiveness associated with experience are steepest in teachers’ initial years but continue to be significant as teachers reach the second, and often third, decades of their careers.\(^{30}\)
In addition, we know that student/teacher ratios can have an influence on student academic success. A significant body of research points to the effectiveness of class-size reduction for improving student outcomes and reducing gaps among students, especially for younger students and those who have been previously low-achieving.\(^{31}\) These reductions for young children have long-term effects on outcomes many years into the future.\(^ {32}\) Often, studies find that the effects of class-size reduction on achievement are greatest when a certain smaller class size threshold (such as 15 or 18) is reached and are most pronounced for students of color and those in schools serving concentrations of students in poverty.\(^ {33}\) A recent comprehensive meta-analysis of programs and strategies for improving outcomes for children from low-income families found that interventions that intensify human resources are particularly effective compared to alternatives.\(^ {34}\) Examining 101 studies from the past 15 years, the researchers found the largest effects on achievement were from interventions such as tutoring and small-group instruction.

The Learning Policy Institute analyzed the most recent U.S. Department of Education data for New York on both school district revenue and pupil/teacher ratios. The graph below makes it clear that the lower the per-pupil revenue, the higher the student/teacher ratio.
Graph 1
Relationship Between New York State School District Revenue per Pupil and Pupil/Teacher Ratio, 2014–2015

Note: Outliers (districts with revenues greater than $70,000 per pupil) are excluded from analysis.

The Foundation Aid Formula

These are the types of disparities the Foundation Aid formula was meant to address. This comes to the heart of the puzzle: How is it that New York, with its financial commitment to quality education, still does not provide adequate funds so that all districts in the state are able to offer their students a sound basic education? The short answer is that the current Foundation Aid formula is underfunded, and the lack of funding impacts those districts educating students from low-income families and students of color most directly. Special education and supports for English language learners are also underfunded.
The Foundation Aid formula was designed to ensure schools have all the resources they need to provide a sound basic education for all of New York’s students. As a response to the landmark school funding case, *Campaign for Fiscal Equity vs. State* (CFE), the New York Legislature in 2007 enacted the Foundation Aid formula requiring an additional $5.5 billion in state aid over 4 years. According to the Education Law Center, the state remains $4 billion in arrears on its funding obligation to New York school children. The Alliance for Quality Education makes the following argument related to the current disparities between school districts:

*Two thirds of the districts in New York State are still owed Foundation Aid. By contrast, 100 percent of high needs school districts with majority Black and Latino students are owed Foundation Aid. There are 25 school districts that are both high need and majority Black and Latino. The students in these 25 districts represent 80 percent of the Black and Latino (Latinx) students in the state and 69 percent of the economically disadvantaged students in the state. These 25 school districts are owed 62 percent ($2.6 billion) of all Foundation Aid.*
The Alliance for Quality Education estimates what is owed to these districts in the table below:

<table>
<thead>
<tr>
<th>District</th>
<th>Foundation Aid Owed 2017–18 (Nov)</th>
<th>Percent of Black and Latino Students</th>
<th>Percent of Economically Disadvantaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westbury</td>
<td>$41,170,730</td>
<td>97</td>
<td>93</td>
</tr>
<tr>
<td>Rochester</td>
<td>$111,770,258</td>
<td>86</td>
<td>91</td>
</tr>
<tr>
<td>Wyandanch</td>
<td>$21,389,063</td>
<td>98</td>
<td>91</td>
</tr>
<tr>
<td>Brentwood</td>
<td>$140,144,646</td>
<td>93</td>
<td>88</td>
</tr>
<tr>
<td>East Ramapo</td>
<td>$26,665,648</td>
<td>90</td>
<td>87</td>
</tr>
<tr>
<td>Peekskill</td>
<td>$13,906,816</td>
<td>88</td>
<td>83</td>
</tr>
<tr>
<td>Buffalo</td>
<td>$11,186,663</td>
<td>67</td>
<td>82</td>
</tr>
<tr>
<td>Amityville</td>
<td>$102,910,545</td>
<td>90</td>
<td>82</td>
</tr>
<tr>
<td>Central Islip</td>
<td>$65,471,860</td>
<td>92</td>
<td>79</td>
</tr>
<tr>
<td>Schenectady</td>
<td>$47,454,924</td>
<td>52</td>
<td>79</td>
</tr>
<tr>
<td>Yonkers</td>
<td>$49,349,908</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td>Syracuse</td>
<td>$44,384,631</td>
<td>62</td>
<td>79</td>
</tr>
<tr>
<td>Hempstead</td>
<td>$57,371,140</td>
<td>97</td>
<td>76</td>
</tr>
<tr>
<td>Middletown</td>
<td>$43,377,452</td>
<td>78</td>
<td>76</td>
</tr>
<tr>
<td>Newburgh</td>
<td>$44,246,457</td>
<td>74</td>
<td>76</td>
</tr>
<tr>
<td>New York City</td>
<td>$11,239,095</td>
<td>66</td>
<td>75</td>
</tr>
<tr>
<td>Poughkeepsie</td>
<td>$1,585,306,203</td>
<td>84</td>
<td>75</td>
</tr>
<tr>
<td>Copiague</td>
<td>$11,883,729</td>
<td>81</td>
<td>74</td>
</tr>
<tr>
<td>Mount Vernon</td>
<td>$30,264,651</td>
<td>93</td>
<td>74</td>
</tr>
<tr>
<td>Dunkirk</td>
<td>$5,406,826</td>
<td>58</td>
<td>73</td>
</tr>
<tr>
<td>Freeport</td>
<td>$48,947,816</td>
<td>88</td>
<td>72</td>
</tr>
<tr>
<td>Port Chester</td>
<td>$24,298,786</td>
<td>82</td>
<td>71</td>
</tr>
<tr>
<td>Fallsburg</td>
<td>$2,957,124</td>
<td>57</td>
<td>67</td>
</tr>
<tr>
<td>Albany</td>
<td>$34,477,259</td>
<td>66</td>
<td>60</td>
</tr>
<tr>
<td>Roosevelt</td>
<td>$22,422,210</td>
<td>100</td>
<td>51</td>
</tr>
</tbody>
</table>


The evidence presented above makes it clear that the Foundation Aid formula as it currently is implemented is failing to adequately and equitably fund those districts that educate economically disadvantaged students of color. These disparities have led the New York Board of Regents in their 2019 budget and legislative priorities and state aid request for the 2019–2020 school year to
call for a $2.1 billion increase in Foundation aid to support English Language Learners, career and technical education programs, and universal prekindergarten programs.\textsuperscript{38} According to Board of Regents Chancellor Betty A. Rosa:

\begin{quote}
The Board of Regents and I believe that all children should have access to a high-quality education regardless of their race, where they live or where they go to school. The priorities and proposals put forth today build on the idea that every child in every school deserves to be healthy, safe, engaged, supported and challenged; and they will ultimately allow the Department to implement programs to achieve this goal.\textsuperscript{39}
\end{quote}

\textbf{Lessons From Other States}

Other states have recognized the role of school funding in advancing educational excellence and equity for all students, including students of color. For example, a very recent publication by Linda Darling-Hammond—\textit{Investing for Student Success: Lessons from State School Finance Reforms}—describes several states’ successful paths to school finance adequacy and equity.\textsuperscript{40} One of these states is New Jersey, a majority-minority state with a substantial population of students from low-income families that is New York’s next door neighbor.

New Jersey currently spends about the same amount of money per pupil as New York, but spends these funds much more equitably across districts, with much better results. After 3 decades of litigation regarding deeply inequitable funding, New Jersey finally made a major investment in “parity” for low-wealth, high-minority districts beginning in 1996–97. An investment in preschool was initiated in 2000 and an intensive instructional improvement initiative was undertaken in what are known as the \textit{Abbott} districts in 2003.

By 2007, New Jersey had sharply increased its standing on reading and mathematics assessments nationally—ranking in the top five states in all subject areas and grade levels on the National Assessment of Educational Progress. It was also one of four states that made the most progress in closing achievement gaps between White, Black, and Hispanic students over the previous 4 years in both 4th and 8th grade reading and mathematics. Among these top decile states, New Jersey then had the largest share of Black and Hispanic students from low-income families (17% and
19% of the state’s total students, respectively), far more than other high scorers such as Massachusetts, New Hampshire, and Vermont, and these students far outsored their peers across the country and outsored the average student of any race in California.

By 2017, students of color composed 53% of the New Jersey public school population, and the state’s achievement gains placed it 2nd in the nation in 8th grade reading, 4th in 8th grade math, and 2nd in graduation rates, right behind Iowa. The state also reduced the achievement gap for students with disabilities and for socioeconomically disadvantaged students.

New York is not New Jersey, yet they share many similar characteristics, including a number of high-need urban communities, and a comparison offers some useful lessons. While New Jersey has experienced some challenges, including failure to fully fund the progressive formula in recent years (with accompanying achievement dips), what the New Jersey example demonstrates is that providing economically disadvantaged students of color a sound, basic education is possible when there is a will to invest adequate and equitable resources wisely over time.

**Recommendations**

These findings and research suggest three considerations for the Commission and for state policymakers in your effort to ensure equal educational opportunities for the children in New York State, especially those who have historically been furthest from opportunity:

1. School funding in New York State should be based on student need, with greater state funding allocated to districts serving higher proportions of high-need students as the Foundation Aid formula prescribes. The Foundation Aid formula, which would accomplish this, should be fully funded.

2. This principle should be extended to more adequate and equitable funding of special education students.

3. Districts should be enabled to hire and keep well-prepared educators by coupling funding increases that support improved salaries and working conditions in previously under-resourced districts with stronger educator preparation and induction, mentoring for novices, and ongoing professional learning. Once resources are in place to recruit
qualified teachers and principals to all communities, it is important to ensure that they have the professional knowledge and skills to teach and lead schools successfully.

While not all the educational challenges of New York’s current system can be overcome by these improvements, many of the most damaging consequences resulting from the disparities that have been documented here and elsewhere could be addressed. With a long-term commitment from the state’s educational and political leaders, the pernicious effects of depriving students of color and students from low-income families, a sound basic education can be eliminated.

Investing in the success of all students is not only a state constitutional requirement and a moral obligation, but also an investment in the economic and social future of New York. The evidence is clear—the return on investment from educating all the state’s children so that they reach their potential would result in a larger tax base, lower crime rates, and less dependency on public assistance. These findings have direct bearing on policy formation and school spending, particularly at the state level.

But there is an even deeper reason to invest in the state’s children: Democracy requires a high level of civic participation and knowledge from its citizens if it is to thrive. As Chief Justice Warren noted in the Brown opinion, education “is the very foundation of good citizenship,” and the opportunity to access education, “where the state has undertaken to provide it, is a right which must be made available to all on equal terms.”

Education is the only and best way to build a democracy that works on behalf of all. Children who are deprived of a sound basic education make democracy smaller, less inclusive, and ultimately more fragile. The stakes are very high, and the solution is at hand.

Thank you for this opportunity; I would be happy to answer any questions that Members of the Committee may have.
References


