

# **FULFILLING THE PROMISE**

**GETTING HIGH QUALITY TEACHERS  
INTO EVERY NEW YORK CITY CLASSROOM  
AND KEEPING THEM THERE**

**REPORT OF  
THE NEW YORK CITY COUNCIL  
COMMISSION ON THE CAMPAIGN FOR FISCAL EQUITY  
PART I**

David Jones  
Arthur Levine  
Co-Chairs

Anthony Alvarado  
Executive Director

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## **Members of the Commission**

**Ana Bermudez**, Parent and Director of Community Prep High School

**Jill Chaifetz**, Executive Director for Advocates for Children of New York

**Luis Garden Acosta**, Founder, President, and CEO of El Puente

**Anita Gomez-Palacio**, Executive Director of the Council of School Supervisors and Administrators (CSA)

**Hon. Robert Jackson**, New York City Council Member for District 7

**David Jones**, (Co-Chair) President and CEO of the Community Service Society

**Dr. Arthur Levine**, (Co-Chair) President and Professor of Education at Teachers College Columbia University

**Joan McKeever-Thomas**, Chair for the Staten Island High School Presidents Council

**Gail B. Nayowith**, Executive Director for the Citizens' Committee for Children of New York

**Dr. Pedro Antonio Noguera**, Professor, Steinhardt School of Education, New York University

**Amina Rachman**, Special Assistant to the President of The United Federation of Teachers

**Peter F. Tufo**, Former appointee to the New York City Commission on Education

## **Commission Staff**

Anthony Alvarado, Executive Director

Melorra Sochet, Deputy Director

Shefali Trivedi, Policy Analyst

# **Fulfilling the Promise**

## **PART I**

### **Getting High Quality Teachers Into Every New York City Classroom And Keeping Them There**

## **EXECUTIVE SUMMARY**

New York City public school students have been shortchanged for years. Their right to a sound basic education has been denied. After a decade of legal action, the Campaign for Fiscal Equity (CFE) succeeded in persuading the courts of this State to order action to remedy this situation, specifically by a funding plan that provides additional funds, to the tune of \$5 billion in yearly operating expenses and \$9 billion in capital expenses, for the City's schools.

This Commission has had a single unwavering focus – the children of New York City. The additional funding the CFE decision brings has the capacity to profoundly improve both the quality of our schools and the performance of our children. But only if we invest it well.

The report of this Commission is designed to improve the learning of all of New York City's children. We know what is necessary for our children to learn at the levels they need to be effective citizens and productive members of society: quality teachers, appropriate class sizes to support learning, sufficient time to learn, curriculum and instruction geared to student needs, quality school leaders, adequate facilities and infrastructure, early education and identification of needs, and assessment and accountability.

The report that follows is Part I of what will be a two-part report.

**Part I makes recommendations for Teacher Quality and Class Size for the entire system and for high-need low-performing schools in particular. It also focuses on Accountability, which must go hand in hand with any reform.**

**Part II, to be released this summer, will focus on Leadership, Instruction, Facilities, Pre-Kindergarten, Technology, Student Support, After-School and Parent and Community Connections.**

The release of this report in two parts is not intended to prioritize certain issues over others. The current phase of the CFE litigation involves determining how best to allocate the funds, fashion accountability mechanisms, and conceive of teacher quality,

all issues that are incorporated in this first set of recommendations. These issues, which are as complex as they are important, need rigorous debate before the public and it is our hope that these recommendations will hasten and inform that debate.

The exhilarating sense of victory for the City's 1.1 million schoolchildren as a result of the CFE lawsuit is tempered by the skepticism of long-time school system watchers, who know how easily money, especially vast amounts of money, can be misused in a system this large. Successful school finance cases across the country have garnered mixed results in the implementation stage, and reformers in some jurisdictions have been unable to translate large financial remedies into the system-wide gains in student achievement that were their goal.

The New York City Council appointed an independent Commission on CFE to develop a plan and specific recommendations related to the goals of the CFE decision and the most effective way new funds might be spent to achieve those goals. Chairing the Commission were David Jones, President of the Community Service Society, and Arthur Levine, President of Teacher's College, Columbia University. Anthony J. Alvarado was appointed as Executive Director of the Commission.

The Commission began its work in September 2004, with seven hearings conducted at City Hall and at several local universities. We also conducted a series of five town hall meetings, one in each borough, where we heard testimony on the subjects of Class and School Size, Accountability, Facilities, Pre-Kindergarten and After-school Programs, and Teacher Quality. In addition, we operated an on-line discussion group called *Your Voice, Your Schools*, a virtual blog for comments and observations on the topics of school reform in which 197 people participated. A total of 466 people - parents, teachers, students, experts and advocates - submitted oral or written testimony, sharing stories about the challenges schools across the City face and what is working well and deserves additional support.

We also engaged in extensive research on best practices and reform plans stemming from other educational adequacy lawsuits. We consulted with numerous experts in the field of educational reform as well as local educational leaders and practitioners. We have developed a set of recommendations which we are convinced is not only the best, but the only way to proceed. Cost estimates for our proposals, based on an analysis conducted for the Commission, are appended to this report.

### ***Report Recommendations***

The recommendations in this report are framed around some basic ideas. All students must benefit from the CFE reform. As students' learning hinges on the skills and knowledge of their teachers, teacher quality must be a critical foundation of any serious reform. The shameful fact is that the vast majority of our students are not exposed to high quality teaching. Nor are they receiving education in class sizes conducive to learning. The results are apparent in disappointing student test scores across

the City, they are apparent in abysmal promotion and graduation rates, and they are apparent in the CFE Court’s finding that the City’s students have been denied a sound basic education.

As a corollary, it is imperative that we understand the extent to which high-need low-performing schools require additional strategies to provide that quality teaching to their students.

Finally, reforms must be driven by hard facts, solid evidence about what works and what doesn’t—not by political considerations or newspaper headlines.

### ***Low-Performing Schools***

In the City’s lowest performing schools, the difficulties of attracting and retaining high quality teachers have reached crisis proportions. Too often in the City’s low-performing high-need schools, the sense of failure is so pervasive that even the most dedicated teacher seizes the first opportunity to flee to a “better” district in the City, or to an even more affluent neighboring suburb where the pay is higher and working conditions offer a better opportunity for effective teaching. The ability to attract better teachers – the teachers the City so desperately needs in these poor performing schools—belongs to districts with better salaries to offer.

We need to ensure that teachers come into the school system having knowledge and skills, meaning they know the subject they are to teach and how to teach it well. Although the majority of teachers in the system are now certified, certification is not a guarantee of teacher quality. We also need mechanisms to ensure that teachers continue to develop and meet professional standards. But even more critical to meaningful reform is the need to see that high quality instruction arrives and remains at the destination where it is most needed – in those low-performing high-need schools where quality teaching is rare and student achievement starts low and stays flat.

The Commission identified those schools in the City with the highest need and lowest performing students, in order to understand the extent to which such students were concentrated in particular schools and low income areas. Our preliminary findings regarding the concentration of low-performing students in the City’s schools were startling, even to long-time system watchers. Approximately 63 percent of low-performing elementary and middle school students are attending only 38 percent of New York City’s elementary and middle schools. At the high school level, 47 percent of low-performing students attend only 26 percent of the schools. **Overall, 60 percent of the City’s low-performing students are concentrated in just one-third of the City’s schools.**

Studies indicate that high-need schools require more resources to provide a sound basic education for all students. Simple demographics indicate that there is a substantial number of high-need low-performing schools requiring attention, and the Commission

believes that school reform must concentrate first on these schools. There can be no real reform for the City's schools unless those students most in need are reached by reform efforts targeted at the schools they attend. **And reform must start with the teacher in the classroom – the goal is getting and keeping the most qualified teachers in all those classrooms where academic success is unknown and failure is the rule.**

The Commission recommends a two-tiered approach for reform that takes into account the major educational inequities that exist across the city. **The Commission's recommendations are designed to reach all schools in New York City, from recommended salary incentives to class size reductions to increased teacher supports.** At the same time, **particular attention must be devoted to the numerous schools in the City that are farthest from providing their students with a sound basic education.** The Chancellor's District, a similar effort by the Department of Education (DOE) from 1986 to 2003 to target the lowest-achieving schools operated on a smaller scale, achieved positive results in the targeted schools. We want to build on what was learned from the Chancellor's District and other initiatives focused on low-performing schools.

### ***Teacher Quality***

Teaching is a challenging job, one that requires intensive preparation, a commitment of large amounts of time and energy, and a great deal of skill. Teachers in the movies – from Sidney Poitier to Edward James Olmos – take 90 minutes to forge a relationship that motivates their students to achieve. Teachers in real life, high quality teachers, know there is no quick fix in education. They know that it takes long, hard, intensive, dedicated work over sustained periods of time if the students in their classes are to really learn.

High quality teachers can lecture, teach collaboratively, instruct small groups of learners, and provide support one on one. They have clear and articulated teaching goals and strategies that are integrated in daily activities. In customizing teaching for each learner, good teachers use data effectively for diagnosing learning needs; identify the best practices available for meeting those needs, and work collaboratively with other teachers to create an environment that will allow learning to flourish.

Teacher quality is the hardest thing to deliver, but the most important. Our recommendations combine incentives for high quality teachers in the form of salary increases coupled with a rigorous all-new assessment process. We have designed salary incentives so that the largest increases go to those who are in the lowest performing schools. This is the only way to attract high quality teachers for those in less desirable, poor performing schools.

At the same time, instituting a system of demanding, performance-based assessments will bring meaningful evaluations of teachers' skills and abilities to do the job for which they have been hired. Assessment is the method by which you guarantee

quality. Combined with a career ladder, assessments will help ensure that teachers are in fact high quality instructors, instructors whose good paper credentials match up with their classroom practice.

Our recommendations on teacher quality are intended to illustrate how a strong human resource management system can be organized around sustained development of learning and instructional talent in schools. The Commission recognizes the critical role of the principal as the primary leader of a school and the person responsible for evaluating school personnel. Our recommendations here are not intended to and do not change that role. The Commission's recommendations on school leadership, to be addressed in Part II of this report, will incorporate similar strategies for principals and supervisors, to build leadership capacity at the school level.

By themselves, incentives and assessments are not enough to improve teacher quality. A support program must be put in place to ensure that good teachers stay in our schools. To that end, we have recommended a series of reforms, including:

- A career ladder to create incentives and opportunities for teachers
- Salary incentives for the entire system and in low-performing high-need schools
- Performance-based assessments
- Increased support for beginning teachers
- Professional development to increase teachers' skills and knowledge

### ***Reducing Class Sizes***

One of the significant findings in the CFE decision was that the City's schools have excessive class size, which negatively affect learning.

In light of the research on the relationship between class size and student achievement and learning, the Commission has recommended significant reductions system-wide, with greater reductions in the target schools. Class size reductions affect working conditions as well, and have implications for teacher retention, particularly in low-performing high-need schools.

The Commission recommends that class size reductions begin in the target schools, starting in the lower grades and extending through grade 12. Class size should be capped at all grades, with greater caps imposed for target low-performing schools. This will generate reasonable class size averages and protect against the overcrowded classes that have plagued the City's system for years.



## ***Ensuring Meaningful Accountability***

Finally, if reforms are to succeed, the measure of success must be based on evidence. In the absence of reliable data on the effects of reform, serious accountability is impossible. Public confidence in the public school system will be even more strained if reporting on CFE funding is not conducted in a timely and meaningful fashion so that the system can perform its job and the public can see what the system is doing. The Commission proposes a new public institution to facilitate the meaningful evaluation of school system reform.

- An Independent Institute for Research and Accountability will have the responsibility of evaluating evidence on the course of improvement, identifying opportunities for mid-course changes in strategy, focusing attention on emerging problems, and providing education officials with feedback on how they might sustain and increase the rate of improvement.
- A Blue Ribbon Board of Trustees will provide the checks and balances to ensure the independence of and instill public confidence in the Independent Institute's work.
- An Advisory Group of parents, stakeholders, and representatives of community based organizations will inform the Independent Institute's research agenda and identify unintended consequences of different reform initiatives.

There is no comprehensive, ongoing tracking of reform initiatives, and no effort to discover what works and what does not work. This is the history of reform efforts in New York City. Every chancellor, every reform advocate comes in with a new agenda, and the list of reforms – curricular, organizational, and instructional – is endless. Because each new reform initiative has generally occurred in a vacuum, without a sense of what has been tried and what has and has not been proven to work, and because there has never been the capacity to rigorously evaluate the effectiveness of new initiatives, the system has not been able to develop the knowledge base necessary for continuous and cumulative improvement.

School improvement is a dynamic process, and decision makers must be able to continuously evaluate the success of their multiple initiatives. Without careful and scrupulous analysis, decision makers will be unable to sort out the separate effects of the multiple program activities occurring simultaneously within the New York City school system.

In a democratic society, comprehensive educational reform is most effective when it is tied to a series of checks and balances designed to ensure that all aspects of the system truly benefit children. In order to make the right decisions over time, and to foster continuous improvement by modifying or changing strategies as needed, decision makers have to have meaningful data delivered in a timely fashion. And the public and others in the education community need to be informed of how additional resources are

being spent through a transparent reporting system that gives them meaningful information about what is happening in the schools and real opportunity for critical assessment and comment. They must be assured that reform efforts are made in an objective way, not tied to any particular administration or political ideology.

## ***Conclusion***

This report focuses on strategies that the system must undertake in order to produce achievement gains for all of the students of this city: teacher quality, class size reduction, and assessment.

An all-out effort must be made to ensure that New York City can develop and retain high quality teachers through a strong human resource management system that aligns positive incentives and better working conditions with rigorous assessment of teachers.

The need for reform is urgent, nowhere more so than in our lowest performing schools. Immediate efforts must be directed to ensuring that improved quality teaching reaches those most in need: the low-performing and high-need students concentrated in low-performing high-need schools.

Finally, we must have a system in place to assess reform initiatives and report on them in a way that encourages the Department of Education to continuously improve its work and provides the public with a measure of real accountability.

The challenges of school reform are great, but so is the promise. We have, as never before, the resources to address the problem of teacher quality. Those resources have the power to achieve a simple goal, up to now unimaginable and unattainable: getting high quality teachers in every classroom in New York City and keeping them there.

If we are serious about providing a sound basic education for all of the City's schoolchildren, we will be driven by these goals. What is at stake here is nothing less than the future of our children, who deserve the education promised them by the State Constitution and the Court ruling in the CFE suit. We believe that the recommendations contained in this report will make sure that they get it.

## RECOMMENDATIONS

### Commission's Recommendations

The Commission's recommendations are designed to improve the entire school system. In Part I of the report, they are targeted at improving teacher quality through incentives that attract quality teachers into the system, through enhanced teacher supports that ensure continuous teacher learning and reduce retention rates, and through assessment mechanisms that ensure that only quality teachers remain in the system. The report also outlines an accountability system for ensuring that the public and practitioners know which reform strategies are and are not working. Because it is most challenging to improve teaching and learning in the City's lowest performing schools, the Commission has adopted a two-tiered approach to many of its recommendations, to improve all of the schools in the system and identify the lowest performing and highest need schools for special attention.

### *Identifying Schools for Targeted Reforms*

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#### RECOMMENDATION 1

**Identify low-performing, high-need schools** in the City's school system and make their improvement a barometer of the effectiveness of the system's reform efforts. An Independent Institute, recommended by this report, will conduct a study to identify these schools as target schools for augmented support and determine whether the Commission's intensified strategies for these schools are producing desired results.

### *Improving Teacher Quality*

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#### RECOMMENDATION 2

Provide all teachers with **salary incentives** of 3 percent (to be added to any negotiated increases) in order to begin to bring local salaries in alignment with the regional teacher labor market. To increase the number of qualified teachers in low-performing high-need schools, teachers in target schools will receive an additional 7 percent increase, or 23 percent for target schools on an extended-year calendar. Teachers who attain Master Teacher status, demonstrating high quality, will receive an additional 10 percent increase.

**Estimated cost: \$658.7 million**

#### RECOMMENDATION 3

**Shift the rationale for teacher compensation from solely years of experience to knowledge and skills.** Linking compensation to knowledge and skill will increase the number of high quality teachers throughout the system.

#### RECOMMENDATION 4

**Create a Career Ladder with three rungs: Novice, Career and Master.** This will create incentives and opportunities for teachers to become more skilled, to assume additional responsibilities, to remain within the teaching profession and to advance teacher quality throughout the system.

### RECOMMENDATION 5

Assign **one Master Teacher for every 500 students in a school**, with a maximum of three Master Teachers per school. Assign **one Master Teacher for every 250 students in target schools**, with no limit on the number assigned per school. This will ensure that Master Teachers' expertise is available to every school in the system so that instructional support is of the highest quality.

**Estimated cost: \$163.3 million**

### RECOMMENDATION 6

Set and enforce high professional standards through a **comprehensive assessment system** to screen teacher candidates, evaluate teachers' classroom performance and pedagogical and content knowledge, strengthen tenure requirements, and evaluate Master Teacher candidates. Rigorous teacher assessments will ensure that only high quality teachers enter and remain in the system, progress up the career ladder and receive salary increases.

### RECOMMENDATION 7

Embed in every school a comprehensive, **new teacher support package** that connects on-the-job learning to meaningful performance assessment. Providing teachers with the support during their early teaching years will make them more effective and reduce the likelihood of their leaving the profession.

**Estimated cost: \$422.7 million**

### RECOMMENDATION 8

Focus teacher learning on content and higher-order thinking, **tie professional development directly to instruction and classroom practice**, and recruit and train highly competent personnel to conduct all professional development activities. By creating a comprehensive professional development program, the system will promote and integrate continuous inquiry and improvement in the daily life of schools.

**Estimated cost: \$191.1 million**

### *Reducing Class Sizes*

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### RECOMMENDATION 9

**Cap class sizes in grades K-12.** Imposing caps will allow for individualized instruction, additional time on task and superior classroom conditions for both teaching and learning. A class size average of 14.1 students in K-3 target schools is produced by a cap of 15. (A class size average of 16.6 is produced in non-target K-3 schools by a cap 18.) An average of 20 students in 4<sup>th</sup>–5<sup>th</sup> grade target schools is produced by a cap of 22. (An average of 24 students in 4<sup>th</sup>–5<sup>th</sup> grade non-target schools is produced by a cap of 27). An average of 23.7 students in 6<sup>th</sup>–8<sup>th</sup> grades target schools is produced by a cap of 25. (An average of 25.9 students in 6<sup>th</sup>–8<sup>th</sup> grade non-target schools is produced by a cap of 28); and an average of 24.3 students in 9<sup>th</sup>–12<sup>th</sup> grade target schools is produced by a cap

of 25 students. (An average of 26.5 students in 9<sup>th</sup> –12<sup>th</sup> grades is produced by a cap of 28).

**Estimated cost: \$783.6 million**

#### *Ensuring Meaningful Accountability*

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#### **RECOMMENDATION 10**

Create an Independent Institute for Research and Accountability (the Independent Institute), whose mission is to provide the public, the DOE, the schools, the Mayor, the State and the Court with evaluation of educational reform initiatives by the school system, and student performance, parent/student/teacher satisfaction, and a tracking of the dollars from the CFE case. This independent body will conduct educational research and assessment needed to report on system reforms, provide data to the public, and instill public confidence. **Estimated cost: \$8.0 million**

**Total estimated cost: \$2.227 Billion**

## INTRODUCTION

New York City students are being denied their right to a sound basic education. This was the conclusion of the courts of New York State, after more than ten years of landmark litigation led by the Campaign for Fiscal Equity. To remedy this wrong – to provide a sound basic education to the City’s students – the Court has ordered the State to implement a funding plan that will provide the New York City school system with an additional annual \$5.63 billion for operations to be phased in over a four-year period and an additional \$9.179 billion for capital expenses over the next five years. The Commission has taken up the charge of ensuring that all students in the City benefit from the new influx of funds and has designed a set of recommendations to make sure that this occurs.

*The Promise* - This victory provides a newfound sense of promise for many of the City’s 1.1 million school children who attend public schools where teachers are inexperienced, facilities are in disrepair, and class sizes are significantly larger than those in nearby suburbs. This is a once in a lifetime opportunity to provide the kind of education that will redirect the course of their lives and those of future generations.

*The Pitfalls* - In that victory lies a trap. If the experience of other states is a harbinger of what is to come in New York City, there is reason to proceed with caution, for resources that are squandered or misused will fail to make a meaningful difference in students’ lives. With an influx of much-needed funds in sight, New York City faces a new challenge: how to fulfill the great promise offered by the Court’s decision, and translate it into action that will achieve the desired results of providing the education the city’s children deserve.

Tragically, some school financing cases have been more successful at securing increases in funding for schools than they have been at creating the conditions necessary for meaningful school reform — increases in teacher quality, learning opportunities and achievement, and improvements in school climate. States where reforms have been generated by educational adequacy lawsuits have generally produced isolated examples of high quality instruction for small populations of children. Many have not been able to sustain and develop those examples over time and they have not been able to achieve more than modest performance gains in schools with the highest need and lowest performing students. It is these minimal results that must be avoided if the CFE lawsuit is to realize the fulfillment of its goals for New York City’s schoolchildren.

Moreover, we recognize that the whole nation will be watching what New York City does with its schools and what it makes or fails to make of this opportunity. What happens here will reverberate in Chicago, Los Angeles, Miami, Houston and virtually every other major metropolitan center across the United States. Not surprisingly, when the opportunities for dramatic improvements are extraordinarily high, the consequences of failure are also extraordinarily far-reaching. What is done here, and what is learned

from it, will likely shape the future course of American public education well into the 21<sup>st</sup> century.

### ***New York City Council Commission on CFE Implementation***

The New York City Council appointed an independent Commission on CFE to develop a plan and specific recommendations related to the goals of the CFE decision and the most effective way new funds might be spent to achieve those goals. Chairing the Commission were David Jones, President of the Community Service Society and Arthur Levine, President of Teacher's College, Columbia University. Anthony J. Alvarado was appointed as Executive Director of the Commission.

This report is the product of many individuals' observations and expertise. In preparing this report, the Commission believed it critical to conduct an open and visible planning process. We solicited the opinions of local and national experts in comprehensive school reform and the school community, including educators, community leaders, advocates, people in public service and business, parents and children that attend the City's schools, to ensure that those affected by the educational system would have an opportunity to tell us how they thought the CFE money should be spent and to help us identify those areas of reform most pressing for our children.

The Commission began its work in September 2004, with seven hearings conducted at City Hall and at several local universities. We also conducted a series of five town hall meetings, one in each borough, where we heard testimony on the subjects of Class and School Size, Accountability, Facilities, Pre-Kindergarten and After-school Programs, and Teacher Quality. In addition, we operated an on-line discussion group called *Your Voice, Your Schools*, a virtual blog for comments and observations on the topics of school reform in which 197 people participated. A total of 466 people - parents, teachers, students, experts and advocates - submitted oral or written testimony, sharing stories about the challenges schools across the City face and what is working well and deserves additional support. Many of their comments are integrated throughout this report.

In addition, we conducted extensive research, including studies on reform plans stemming from other educational adequacy lawsuits. We consulted with numerous experts in the field of educational reform as well as local educational leaders and practitioners. We have developed a set of recommendations which we are convinced is not only the best, but the only way to proceed.

**The Commission's report is designed to improve the quality of learning for all children in New York City.**

**The report that follows is Part I of what will be a two-part report.**

**Part I makes recommendations for Teacher Quality, Class Size, and Accountability for the entire system and for high-need low-performing schools in particular.**

**Part II, to be released this summer, will focus on Leadership, Instruction, Facilities, Pre-Kindergarten, After-School Programs, Technology, Student Support, and Parent and Community Connections.**

The release of this report in two parts is not intended to prioritize certain issues over others. The current phase of the CFE litigation involves determining how best to allocate the funds, fashion accountability mechanisms, and conceive of teacher quality, all issues that are incorporated in this first set of recommendations. These issues, which are as complex as they are important, need rigorous debate before the public and it is our hope that these recommendations will trigger and inform that debate.

### ***What We Learned: Commission Findings***

The findings that follow, the result of our research work, drive the recommendations of the Commission. The recommendations incorporate the best research, the combined expertise of the lay and professional people with whom we spoke, and the beliefs of the Commission about how change works and what is necessary for successful reform.

#### **Finding: Reform Must Reach Those Most in Need**

It is important to recognize that, within New York City, resources and outcomes are distributed unequally. It is no secret that those sections of the City with the greatest degree of poverty generally have schools with the lowest achieving and highest need students. The work of reforming the lowest performing and highest need schools is the most complex and the most challenging there is because they generally have the weakest teachers and supports and the fewest resources. The lowest performing and highest need schools, too often ignored by educational reform efforts or the last to receive attention and support, remain in a perpetual state of failure.

The system should be judged, in large part, on its ability to improve these schools. Strategies must be designed for these schools specifically, and resources provided to effectively implement these strategies. Over time, the school system can then improve from the bottom up, as the lessons learned from the gains made in high-need low-performing schools benefit efforts to improve the rest of the City's schools.

The Commission has recommended a two-tiered approach to reform that addresses the educational inequities that exist throughout the City. The schools most clearly failing to provide a sound basic education are home to the most vulnerable students in New York City and they have been performing significantly below standards



for many years. They do not have the highly talented teachers, strong teacher supports, and small class sizes necessary to provide meaningful learning environments. The pattern of the lowest performing and highest need students being taught by the least experienced teachers whose credentials are the weakest is particularly problematic given that they are the most dependent on their teachers for academic learning, coming as they often do from homes and communities without the resources necessary to supplement their learning. For these reasons, the schools with the lowest performing and highest need students require an added level of attention and support and the Commission has recommended supplementary strategies and additional allocations to ensure that this occurs.

#### Finding: Teachers and Supervisors Must Be Supported

We learned that educational reform fails when the key contributors to children's learning – teachers and principals\* – do not receive the resources and support that they require and are not held to the standards of excellence that children deserve. Schools' effectiveness hinges foremost on the capacity – the knowledge, skill, and experience - of the individuals who work in and run them. Major instructional improvement necessitates a grand scale investment in human resources.

Reforms must be directed to the work of teachers in the classroom if they are to have any impact on children's learning. Children learn best from teachers who are supported in their work, who are assessed to ensure their work is of the highest quality, and who receive the support they need to deliver high quality services.

The City's school system has suffered from its inability to fully invest in capacity building at the school and classroom level. School improvement must be a reciprocal relationship. If the school system wants schools, administrators, principals, or teachers to do something they don't have the capacity to do, then it has the reciprocal obligation to create that capacity if it expects its demands to be met. The central administration cannot point fingers at schools and classrooms unless it first ensures they have the resources, knowledge, pedagogical skill, and understanding of students necessary to improve student learning and school climate.

The Commission is recommending a set of human resource strategies tied to a culture of continuous instructional improvement. Under this system, teachers, in exchange for significant salary increases and reductions in class size, would undergo rigorous assessments to determine their strengths and weaknesses at the point of entry to the system and on an on-going basis throughout their careers. These strategies are not intended to alter the role of the principal or other supervisors, but to provide more

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\* Leadership will be discussed in Part II of the Commission's report. A preview of the research provides overwhelming evidence that the principal is instrumental to school reform at the local level. In effect, both high quality principals and high quality teachers are essential factors in the equation that produces school success. Ideally, both issues would have been considered together in this report. While this was not possible, readers should be aware of the Commission's findings with regard to this issue.

information to be used by supervisors in evaluating teachers. The Commission's recommendations for principals, assistant principals, and supervisors will be included in Part II of this report.

Only those teachers with deep knowledge of content, strong instructional practices that allow for multiple pathways to learning, the ability to work collaboratively with colleagues, and an interest in both students' and their own continuous improvement will be able to enter and remain in the system.

To retain a highly talented teaching pool, teachers must be given opportunities for career advancement and professional growth and receive a heightened level of on-going support and professional development to improve their effectiveness. This support must be school-based, to provide teachers with strategies directly tied to their students' instructional programs.

#### Finding: The Importance of Measuring Real Results

Finally, we heard from participants in states that have benefited from education equity suits that it is critical there be a means for the system to continuously determine what strategies are and are not working.

The Commission also heard from many who cited the experience of the past 40 years, which has witnessed a constant state of flux as new administrations and chancellors have entered and left the City's school system and different approaches to educational reform have come in and out of vogue. Each chancellor and each administration has brought in a "new and improved" set of strategies and organizational structures, regardless of whether what was previously in place was effective. Each new so-called reform initiative has generally occurred in a vacuum, with no reference to what has been tried and what has and has not been proven to work.

Without capacity to rigorously evaluate the effectiveness of new and current initiatives, the system has not been able to develop the knowledge base necessary for continuous and cumulative improvement. Instead, education officials are unable to identify, garner support for, or replicate those efforts that are truly working while continuing to invest money in strategies that fail to produce results. As a consequence, at best, there are only pockets of short-lived improvement.

This must change. The school system must create a culture where all reform decisions – both the programs and practices chosen and the manner in which they are implemented – are based on results. It must develop the expectation that objective and timely data on how all of its initiatives are doing is fundamental, and that program design and implementation decisions will be reflective of what the data says.

What that means is that initiatives must be grounded in data and research proving their effectiveness. Once implemented, recommendations must be continually evaluated

for effectiveness. In those instances where research is not available, and a recommendation is based on the best current thinking or practices, the recommendation will be subject to rigorous evaluation to ensure that it achieves desired outcomes.

Promising reform strategies must be phased in over time. The capacity of major urban school districts to advance rapid change at scale is highly constrained, and many good ideas fail under the burden of the unrealistic expectations that typically accompany them. Proceeding without a careful implementation process is a formula for failure. Even solid “evidence-based practices” such as reduced class size, universal pre-kindergarten opportunities, and summer school and extended day programs can fail to yield improvements when a rapid implementation is pursued at scale. No new strategy or practice should move to scale until it has been tested and deemed effective in a variety of settings. At all times, this work must be guided by systematic evidence about the actual progress of new program developments in New York City.

The corollary is that unsuccessful reform strategies must be phased out. Any strategy deemed ineffective after a specified period of time should be sunsetted. The money associated with the strategy must not get locked into the base; it should be reallocated to other initiatives deemed effective or promising and awaiting evaluation.

To ensure that the strategies implemented in New York City continue to receive funding only to the extent they are producing results, and that those efforts proving effective in certain schools or districts can be effectively replicated across the system, the Commission is recommending the creation of an independent evaluation body. An independent body will complement the DOE’s current data and assessment capabilities and serve as a resource to it, while providing much-needed verification of system performance. Its job will be to identify where funds are going, to evaluate the cost and substantive effectiveness of reform strategies in a timely fashion, to provide elected officials and practitioners with ideas for how to sustain or increase the rate of improvement and how to redirect or eliminate strategies proven ineffective.

It is axiomatic that the creation of such a body requires political will, an element not always present in the educational world. With the advent of CFE funding, New York City will be perfectly poised to support an office for continuous improvement. While it may be politically difficult to discontinue programs that are not working but have a public investment, or to continue programs that are working but are associated with a prior administration or an unpopular constituency, the children of this city deserve leaders committed to their educational improvement above all else. And their leaders deserve the assistance of an independent body able to provide the data to support those hard decisions. An office dedicated to the evaluation function separate from operational responsibilities will benefit the learning of all of New York City’s students and allow New York City to become the school improvement capital of the world.

## ***New York City As the Educational Improvement Capital of the World***

It must be understood that there are no quick fixes in education. Reform efforts must reconcile the conflict that exists between the slow, iterative work of educational improvement at the classroom and the immediate results demanded by officials in the public eye.

Everyone needs to become smarter about improving the City's schools. The recommendations proposed here involve bold, new priorities for education leaders. They are needed to ensure discipline in decisions about resource allocation through the application of rigorous scientific evidence about program success and failure in the schools. Similarly, new mechanisms must also be developed to ensure sustained public engagement so that all stakeholders share in the lessons learned from different initiatives.

Finally, we believe that the outlook for reform is hopeful. The challenges of school reform are great, but so is the promise. No school system has ever before been given the opportunity presented by the CFE decision and the funds that go with it, to address school reform at this magnitude. The size and diversity of New York City make it difficult to implement reform, but also make it the best possible laboratory for reform efforts. It is the Commission's sincere belief that New York City can and should become the educational improvement capital of the nation.

## **REACHING LOW-PERFORMANCE HIGH-NEED STUDENTS AND SCHOOLS**

New York City's 1,300 public schools are as diverse as the students they serve. These schools vary widely in the size of their enrollments, the educational, social, and economic needs of their students, and the experience and quality of their teachers.

The performance of individual schools is closely watched by the public through the multiplicity of published reports on standardized test scores and graduation and dropout rates. The picture that emerges from these data is one of a bifurcated school system, which has been characterized by State Education Commissioner Mills as two different school systems, one that is comprised of schools that are high-performing and well resourced and another with severely low-performing schools with insufficient resources. Schools with the highest percentages of minority children who also have low-income backgrounds have the least experienced teachers, the most uncertified teachers, the lowest-salaried teachers, and the highest rates of teacher turnover.<sup>1</sup>

The numbers show the starkness of the divide: **overall, 60 percent of the City's low-performing students come from one-third of its schools.**

The problem of poor performance is obviously not confined to these schools, but it is evident that if reform efforts are to be successful for all of our children, particular attention must be made to the poorest performing students and schools. These are the schools for which decades of reform initiatives produced little or no positive effect. There can be no real reform for the City's schools unless those students most in need are reached by policy changes and reform efforts designed to benefit the schools they attend.

The Commission recognizes that the CFE case is about providing a sound basic education for all New York City students and our recommendations focus on teacher quality, class size, and other reform strategies highlighted by the Court for the entire school system. Every child in our city should benefit from the additional CFE funding. At the same time, the Commission's investigation confirms that it is far more difficult to effectively implement educational reform strategies in high-need low-performing schools, where working conditions and current workforce policies make them uniformly unable to attract and retain high quality teachers. The Commission believes that in order to raise performance throughout the City, school reform must focus first on bringing quality teaching and other needed reforms to the lowest performing and highest need schools.

### ***Distribution and Concentration of High-Need Low-Performing Students and Schools***

Implementation of reforms in high-need low-performing schools is more costly and more complex, and it is the challenge of any substantive reform efforts to deal with these facts. As part of its research, the Commission conducted a study to identify those

schools in the City with the highest need and lowest performing students, in order to better understand the distribution of these students throughout the City's schools.\*

New York City's public schools show wide variability in the percentage of students with high needs (i.e. students entitled to a free lunch, English language learners, and special education students). Schools with high concentrations of high-need students (i.e. high-need schools) tend to be concentrated in certain parts of the City—areas that are mostly minority and low income.

Sections of the Bronx, Brooklyn, and Manhattan have extremely high percentages of students eligible for free lunch. While 74 percent of all students in the City are eligible for free lunch, three districts in the Bronx (Districts 7, 9, and 12) and three in Brooklyn (Districts 17, 23, and 32) have more than 90 percent eligible. Five other districts (Districts 4, 5, and 6 in Manhattan, 10 in the Bronx, and 19 in Brooklyn) have more than 88 percent eligible for free lunch. The Bronx districts also have large concentrations of students with additional educational needs. More than 20 percent of the students in Districts 9 and 10, for example, are English language learners.

The simple fact is that low-performing students are concentrated in high-need districts. A March 2002 report characterizes certain areas of the city as “virtual educational dead zones.”<sup>2</sup> The report cites seven districts (Districts 5, 7, 9, 12, 19, 23, and 85) (the Chancellor's District) as having less than 30 percent of students passing the City's English language arts exams (ELA), and 14 with less than 30 percent passing the Math exams. The report goes on to say that:

Most of these poorly performing schools are filled with low-income students from Black or Hispanic families. However, there is ample evidence both from within and outside the school system that the link between race, family income and academic achievement can be broken by well run schools.

An analysis of the performance of students in the 32 New York City school districts on state and city tests in 2002–2003 supports these findings. Compared to a citywide average of 44.6 percent, eight districts (Districts 7, 8, and 9 in the Bronx, Districts 16, 19, and 23 in Brooklyn, and District 5 in Manhattan) had less than one-third of students meeting standards on the ELA exam. In math, with a citywide average of 46.9 percent, five districts (Districts 7 and 12 in the Bronx, Districts 16 and 23 in Brooklyn, and District 5 in Manhattan) had less than one-third of their students meeting standards, i.e. performance levels 3 or 4, in math.

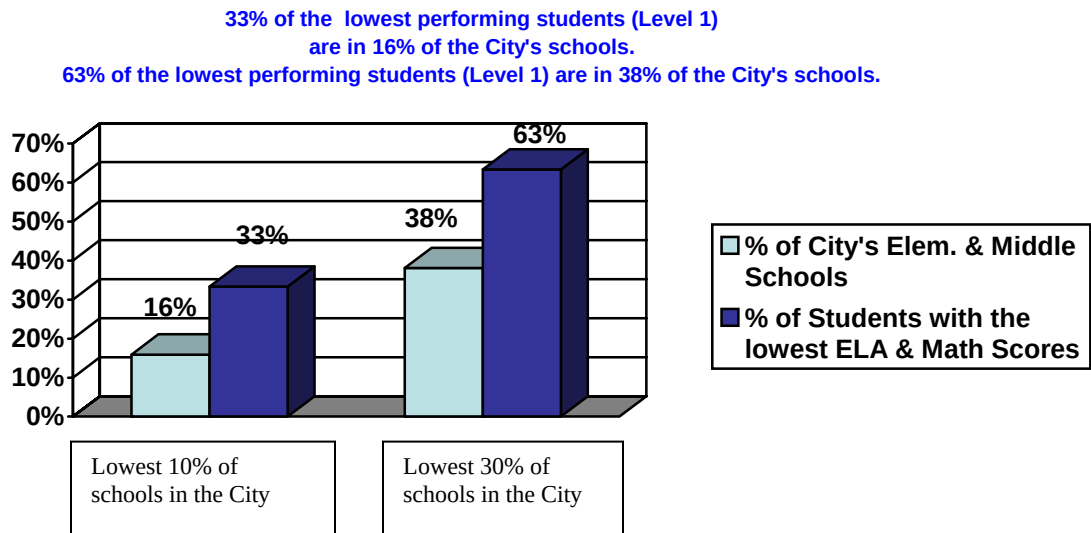
Consistent with these studies, our findings about the concentration of low-performing high-need students in the City's schools, like the above studies, show an extremely high degree of concentration that is startling even to long-time system watchers.

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\* The methodology used in this study is appended to this report.

Approximately 63 percent of low-performing high-need elementary and middle school students are attending 38 percent of elementary and middle schools.

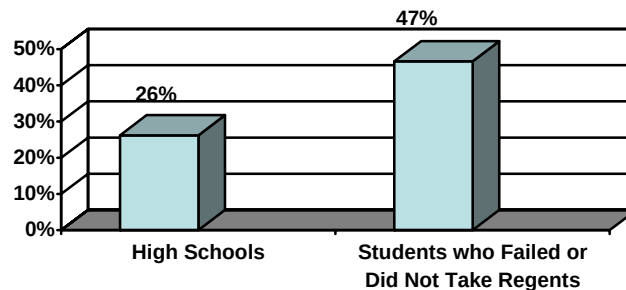
**Table 1**  
**The Concentration of Low-performing Students in New York City Elementary and Middle Schools**



At the high school level, 47 percent of the low-performing high-need students attend 26 percent of the schools. Overall, 60 percent of the City's low-performing high-need students are concentrated in one-third of the City's schools.

**Table 2**  
**The Concentration of Low-performing Students in New York City High Schools**  
**Status of the 1998 Regents Cohort in June 2003**

47% of students in the 1998 cohort who failed or did not take the ELA & math regents exams were in 26% of the City's High Schools

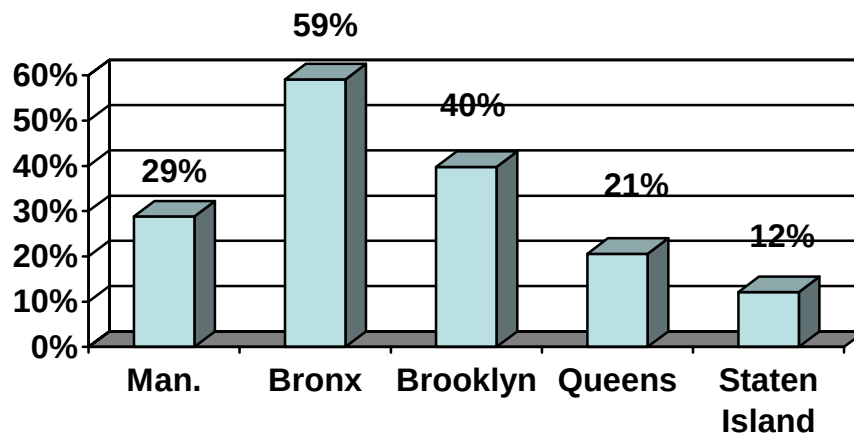


For many years, the State Education Department (SED) has designated schools that were farthest from the state standards as Schools Under Registration Review (SURR). These schools were overwhelmingly located in the districts labeled as the educational dead zone. Currently, there are 35 SURR schools in New York City, which comprise 70

percent of the State's SURR schools. However, there are many more low-performing schools in New York City. Under the No Child Left Behind federal legislation, the SED must annually identify Title 1 Schools in Need of Improvement (SINI). These are schools that receive Title 1 funds and do not make adequate yearly progress on state standardized tests in English language arts (ELA) and/or math for two or three consecutive years. As of September 2004, 150 New York City public schools were designated SINI, and an additional 195 SINI-designated schools that failed to improve were placed in Corrective Action or restructuring. In addition, there were 119 low-performing schools not receiving Title 1 funds that were identified as Schools Requiring Academic Progress (SRAP).<sup>1</sup> In total, about 36 percent of the City's schools have been designated low-performing by the SED accountability system.

**Table 3**  
**Percent of All Borough Schools Identified as High-Need and Low-Performing**  
 (Based on 2002 – 2003 Annual School Report Data)

**Nearly 60% of All Bronx Schools are Low Performing, as are 40% of the Brooklyn Schools, and Almost 30% of Manhattan Schools**



Large numbers of these schools are located in the districts cited above for high percentages of low-income, high-need students and inexperienced teachers. The table above shows the percentage of schools in each borough identified as high-need low-performing.

<sup>1</sup> SINI and SRAP overlap with SURR schools and most SURR schools also fall under the other designations.



### ***Implementing Reform Strategies in High-Need Low-Performing Schools***

A study commissioned by the Court in the CFE litigation to determine the cost of providing a sound basic education for all students in New York State found that schools serving high percentages of low income students, English language learners, and special education students required a greater per-pupil expenditure in order to implement necessary improvement strategies.<sup>3</sup> The study found that schools with higher concentrations of high-need students (i.e. high-need schools) are under-resourced by current allocation formulas and require additional resources to enable their students to receive a sound, basic education.

Research shows that no factor, within the domain of a school, has a greater impact on student learning than a quality teacher. Such teachers, a priority for all our students, are most critically needed in high-need low-performing schools. Those districts with large concentrations of high-need, low-performing students tend to have the least qualified teachers. While 50 to 60 percent of the teaching staff in nearly half of the City's districts have less than five years experience—indicating a systemic retention problem—the problem is especially acute in high-need low-performing schools. For example, in District 23 schools, less than 40 percent of teachers have more than five years experience, as do less than 45 percent of the teachers in Districts 7, 9 and 16.

This is in accord with statewide research that finds students in the lowest performing 5 percent of schools (the vast majority of which are in New York City) have a one in five chance of being assigned a teacher with one year or less of teaching experience, and a one in four chance of being assigned a teacher whose degree is from one of the nation's least competitive colleges.

Since low-performing students are largely concentrated in particular schools and communities, researchers found that general efforts to improve the overall quality of the teacher workforce and student learning are unlikely to ensure that all students achieve high to even minimal educational standards. According to some experts, general workforce policies at best provide very blunt instruments for addressing the problem.

Their conclusion? “Far more targeted action is needed if significant progress is to be made with respect to assuring all traditionally low-performing students are taught by highly skilled teachers.”<sup>4</sup>

There is evidence from the DOE to support the application of additional resources to the City's low-performing schools. Two studies found substantial improvements in New York City SURR schools in response to the infusion of resources to attract more experienced staff for an extended time program that included curriculum redesign and new instructional programs.<sup>5</sup> A third study found a strong relationship between the percentage of certified teachers in a school and the improvements in student scores on the ELA and math tests for all New York City elementary and middle schools.<sup>6</sup> It should be noted, however, that these studies did not measure teacher quality.

There is no dispute that targeted action is needed to ensure progress for low-performing students concentrated in low-performing high-need schools. The Commission's recommendations are designed to develop and distribute teacher expertise and resources in a more equitable manner in order to provide a sound, basic education for all New York City schoolchildren.

Determining which schools are the highest need and lowest performing in the City is a high stakes matter, as more intensive reform strategies will be implemented in those schools identified. While our Commission utilized a set of models, detailed in the appendix, to identify **404 high-need low-performing schools in the City** based on available data from 2002-03, this process needs to be updated using current data and models selected by independent expert researchers.

## **RECOMMENDATION 1**

Identify low-performing, high-need schools in the City's school system and make their improvement a barometer of the effectiveness of the system's reform efforts. An Independent Institute, recommended by this report, will conduct a study to identify these schools as target schools for augmented support and determine whether the Commission's intensified strategies for these schools are producing desired results.\*

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\* Several recommendations in this report contemplate research to be conducted by an Independent Institute for Research and Accountability (Independent Institute), the creation of which is a recommendation of the Commission. The recommendation for an Independent Institute is described in detail later in this report.

## **BUILDING TEACHER QUALITY**

The contributions teachers make to student learning and achievement surpass all other school factors. The evidence is compelling: while differences in student achievement can be attributed to individual and family background characteristics, of all the school characteristics that impact achievement, teacher quality has by far the greatest affect.<sup>7</sup> Studies of student achievement in numerous states, including California, Texas, North Carolina and Alabama, have concluded that qualified teachers account for a large share of the variance in students' achievement, and that teachers have a direct effect on student learning.<sup>8</sup>

Moreover, the impact of teachers on student achievement is cumulative over time. The more years spent with high quality teachers, the better a student performs as compared to peers with low quality teachers. For example, one study found that elementary school students assigned to three highly effective teachers for three consecutive years had math grades more than 50 points higher than students assigned to three ineffective math teachers for three consecutive years.<sup>9</sup>

The 1996 National Commission on Teaching and America's Future concluded that:

Every aspect of school reform – the creation of more challenging curriculum, the use of performance based assessments, the implementation of decentralized management, the invention of new model schools and programs – depends on highly skilled teachers. Successful programs or curricula cannot be transported from one school to another where teachers do not know how to use them well. Raising graduation requirements has proved to be of little use where there are not enough qualified teachers prepared to teach more advanced subjects well. Mandates for more math and science courses have been badly implemented, because of chronic shortages of teachers prepared to teach these subjects. Course content is diluted and more students fail when teachers are not adequately prepared for the new courses and students they must teach. In the final analysis, there are no policies that can improve schools if the people in them are not armed with the knowledge and skills they need.<sup>10</sup>

A significant study of New York City students conducted by the DOE confirmed the importance of quality teaching for the city's schools. The study found a substantial relationship between the percentage of certified teachers and the percentage-point change in elementary and middle school students meeting grade-level standards. As discussed in the previous section, a 10 percentage-point increase in certified teachers was associated with a 3.7 percentage-point increase on ELA test performance and a 4.8 percentage-point increase on the math test.<sup>11</sup>

Researchers have found that teacher quality has a particularly significant impact on low-income students:

- The combined effects of teaching variables can outweigh the effects of socioeconomic status on student achievement in all grades.<sup>12</sup>
- The gain from having a very good teacher (one standard deviation better) rather than an average teacher for three years in a row is roughly equal to the average mathematics test score differential between low-income students eligible for a subsidized lunch and higher-income students not so eligible.<sup>13</sup>
- In a study of North Carolina students, teacher quality strongly predicted student success or failure on state tests. A 1 percent increase in teacher quality was associated with a 3 to 5 percent decline in the percentage of students failing the exam. Researchers concluded that improving the quality of teachers in the classroom would be more beneficial to educationally at-risk and prone to failure students than any other education policy measure.<sup>14</sup>

In short, while a large portion of the disparity in the educational attainment of students can be attributed to major differences in their home and community environments, the differences in educational attainment and the failure of many students to achieve even minimal educational standards is also substantially affected by the teachers they have.<sup>15</sup>

It is important to state at the outset that there is no good school without a good principal. The Commission believes that school leadership is critical for any reform effort. While this Part I of our report focuses on the system's teaching force, **Part II will discuss issues concerning principals and supervisors**, addressing goals and offering strategies parallel to those we are proposing here for teachers.

### ***Profile of a Quality Teacher***

Teaching is a challenging job, one that requires intensive preparation, a commitment of large amounts of time and energy, and a great deal of skill. High quality teachers have a strong educational background that prepares them to work in the school system. They arrive with a mastery of the subject matter they teach. They know how to convey fundamental concepts in a variety of ways that meet students' myriad learning styles. They can lecture, teach collaboratively, instruct small groups of learners, and provide support one on one. Good teachers share values and a professional commitment with their colleagues, as well as have clear and articulated teaching goals and strategies that are shared by members of the school and implemented in its daily activities.<sup>16</sup>

In customizing teaching for each learner, teachers must use data effectively for diagnosing learning needs, identify the best practices available for meeting those needs and work collaboratively with other teachers to create a common set of norms and commitments.

High quality teachers have a deep belief in student capacity to learn and teachers' capacity to help students learn at high levels. They are able to work with students' different levels of subject matter understanding and keep all children engaged in learning by building on their strengths and creating interactive assignments. They do not teach to standards, but rather integrate standards into rigorous and exciting classroom study.

High quality teachers see teaching as an art that can be continuously improved. They review, recreate and share curriculum and instructional resources as well as seek out professional development opportunities for further growth.

Finally, high quality teachers are able to work with fellow teachers, administrators, the principal and other school staff to establish strong relations with individual students, parents and the community at large and generally create a healthy school climate.

### ***Critical Shortage of Quality Teachers in the City's Low-Performing Schools***

It is no exaggeration to say that the challenge of getting and keeping high quality teachers in New York City has reached crisis proportions. Side-by-side New York City and New York State figures on certification exam passing rates paint a stark portrait: 31 percent of City teachers failed the liberal arts/science exam (compared with 5 percent statewide); 47 percent failed the mathematics test (compared to 21 percent statewide); and 27 percent failed the elementary teaching skills test (compared to 3 percent statewide).<sup>17</sup> More recently, the numbers of certified teachers in the system has increased. The DOE reports that 98 percent of its teachers are certified, although these figures include an unknown number of teachers with Modified Temporary Licenses. In response to a request from the DOE, the State Board of Regents adopted a regulation to allow school districts with vacant teaching positions in demonstrated subject matter shortage areas to issue modified temporary licenses for the 2003-04 and 2004-05 school years.<sup>18</sup>

The increase in the City's certification rates does not mean that the majority of teachers are of high quality. Certification is not a proxy for teacher quality. According to the U.S. Department of Education, states employing academic content assessments "set the minimum passing score – or cut score – so low as to screen out only the very lowest performing individuals. For all practical purposes, this means that such assessments do not guarantee professional quality. It is, therefore, not surprising that pass rates reported by institutions of higher education are routinely reported as being 90 percent or higher".<sup>19</sup>

While the system as a whole faces serious problems recruiting and retaining enough qualified teachers, the problem is particularly acute in New York City's low-performing high-need schools. Nationally, teachers in low-performing schools overwhelmingly have less content knowledge and teaching experience than their colleagues in higher-performing schools. They also are more likely to be teaching in fields for which they lack strong subject matter preparation and working under temporary

or emergency certification.<sup>20</sup> The situation is no different in New York City. Teachers in New York City's high-need low-performing schools lack teaching experience. In 2002, only 61 percent of the teachers across the City had five or more years of teaching experience,\* and five of the highest need and lowest performing community school districts, had, on average, teachers with the least experience (measured by average teacher salary).<sup>21</sup>

This data is reflected in the results of one study which examined teacher quality in some of the City's most disadvantaged schools and found that "the higher the percentage of high-need students attending particular schools within New York City, the less likely that the teaching force in these schools was licensed, prepared, certified and stable, and the lower the teachers' average salaries."<sup>22</sup>

What does this mean for New York City students? Simply put, teachers in a large portion of the City's lowest performing schools have significantly lower qualifications than those in the City's highest performing schools. Not only are many of the lowest performing schools in the State located in New York City, many of the State's least qualified teachers are in the City and in these schools. New York City students failing to achieve even minimum educational standards are being taught by individuals whose qualifications are inadequate, and who are themselves unable to meet minimum educational standards, much less to demonstrate the academic and instructional skills needed for these students.

### ***The Challenge of Retaining Quality Teachers***

There are a number of reasons that lower performing schools find it so much more difficult than higher performing schools to both recruit and retain expert teachers. The most outstanding are low salaries and poor working conditions. District hiring practices that are cumbersome, poorly managed, insensitive to teacher qualifications and delayed by seniority transfer rules and a variety of other self-inflicted procedures also make it difficult to staff urban, low-performing schools with high quality teachers.<sup>23</sup> Recruitment in urban, and particularly low-performing, schools often occurs late, in the spring or summer, in contrast to the fall or winter recruitment schedule of more advantaged school districts. Research shows that late hiring practices are a primary cause of urban districts' difficulties in recruiting high quality teachers and their hiring of less qualified teachers.<sup>24</sup>

Exacerbating this situation is that many experienced teachers engage in self-selection, choosing to teach in and transfer to schools with the best working conditions and highest achieving, most motivated students. While some may spend a year or two in a low-performing school, most move to higher performing schools when the opportunity arises, leaving new teachers and those without teacher training to work in the most disadvantaged schools.<sup>25</sup>

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\* The number of teachers with 5 or more years teaching experience in New York City has been decreasing. It was 61.6 percent in FY 2001, 60.6 percent in FY 2002, 60.1 percent in FY 2003 and 59.7 percent in FY 2004. Mayor's Management Report, FY 2004.

The teaching profession has long experienced steep attrition in the first few years of teaching. According to research by Linda Darling-Hammond, a national expert on educational reform, every year large numbers of teachers leave their schools and districts, and approximately one-third of new teachers leave the profession altogether within five years.<sup>26</sup> Attrition is a far more serious problem in urban than suburban school districts, and is particularly acute in low-performing urban schools, which by and large have worse working conditions than their higher-achieving suburban counterparts. Teacher turnover is 50 percent higher in high-poverty than low-poverty schools, and new teachers in urban districts exit or transfer at higher rates than their suburban counterparts.<sup>27</sup>

Staff instability compounds the already difficult circumstances in which many disadvantaged students attend school. In schools with high staff turnover, instruction is left to short-term substitutes or inexperienced novices, usually teachers with little or no knowledge of the subject or teaching methodology.

These difficulties in retaining staff in disadvantaged schools are exacerbated by the fact that these institutions provide teachers with fewer, and lower quality, supports than their more advantaged counterparts, supports that have been proven to increase both teacher recruitment and retention.<sup>28</sup> As a recent study on new teachers' experiences in both high and low-income schools puts it:

New teachers in low income schools receive significantly less assistance in the key areas of hiring, mentoring and curriculum than their counterparts working in schools with high income students. Compared to new teachers in high-income schools, they are less likely to experience a hiring process that gives them a good preview of their job, less likely to have a good match with their mentor and to have frequent and substantive interactions with him or her, and less likely to feel that they receive appropriate curricular guidance. This gap in support is cause for alarm, for previous research shows that support for new teachers helps them feel successful in their first years of teaching and may facilitate retention. Thus, *because they offer significantly less support to new teachers, the schools that demonstrate the most acute need for skilled teachers are...least likely to succeed in attracting and retaining them.*<sup>29</sup>

Finally, the overall school environment at these schools is not conducive to recruiting and retaining the highest quality teachers. A school's environment, i.e. its leadership, safety, relationships among students and staff, and physical facilities, contribute greatly to teacher satisfaction. The fact that low-performing schools tend to be more crowded, dangerous and chaotic, have fewer enrichment activities and weaker leadership than their more advantaged counterparts means not only that students must learn in a poor learning environment, but also that these schools have working conditions that many high quality teachers wish to avoid.<sup>30</sup>

The result is nothing less than a vicious cycle for low-performing schools and the students in them. "Schools having fewer qualified teachers result in lower test scores,

which in turn make the schools less attractive places to work. The situation can be reversed, however. Success in improving the attractiveness of work environments can improve teacher quality and, in turn, the academic performance of students, which will make these schools more attractive places to work”.<sup>31</sup>

### ***Summary of the Commission’s Recommendations on Improving Teaching***

The Commission recommends a series of policies to improve teacher quality. These recommendations align incentives with the goal of enhancing instruction in New York City public schools.

As a first step, these policies make teacher recruitment, development and retention practices more efficient, effective and rigorous while making teaching more attractive as a profession system-wide, and particularly in high-need low-performing schools, through:

- increased salaries for New York City teachers to reduce the disparity with that of teachers in surrounding communities;
- additional salary incentives for experienced highly qualified teachers to work in schools with high-need low-performing students;
- improved conditions for teaching and learning by reducing class size, providing social service supports, and assuring adequate facilities and supplies (social service supports and facilities will be addressed in Part II);
- improved conditions for teachers’ growth by offering meaningful professional development opportunities connected to teachers’ individual classroom challenges;
- a career ladder, i.e. opportunities for teacher advancement from Novice to Master Teacher, that recognizes and rewards teacher performance and the willingness of highly competent teachers to teach and lead throughout the system and in high-need schools;
- knowledge and skills based pay that rewards only teachers who acquire greater knowledge and use it to meet school needs; and
- rigorous teacher performance assessments for prospective teachers, tenure candidates, knowledge and skills evaluation, and advancement to Master Teacher status.

Research shows that teachers will choose to work and remain in the hardest-to-staff schools if they are paid well and provided with sufficient preparation and supportive working conditions.<sup>32</sup> The Commission recommends that the salaries of all teachers be brought closer to levels of the suburban schools with which New York City competes for teachers, so that more qualified individuals are attracted to the teaching profession. Teachers will be required to demonstrate their quality through a rigorous assessment process in order to receive these increases. In order to make teaching in low-performing schools a more desirable option for talented and highly qualified individuals interested in



the teaching profession, we recommend significantly higher salaries for teachers in these schools.

However, higher salaries on their own do not increase teacher recruitment and retention in low-performing schools in a meaningful way. As one researcher notes, “No one should regard pay reform as some kind of ‘silver bullet’ that can, by itself, overcome our teaching quality challenge”.<sup>33</sup> To substantially improve teacher quality in low-performing schools, it is important to develop and sustain not just higher salaries tied to displays of teachers’ knowledge and skills, but also positive working conditions. Research indicates that teachers sort themselves based on differences in working conditions between schools. Class size, leadership, safety and teacher supports (e.g., high quality induction and professional development) are all factors that teachers take into consideration when deciding at which school to teach.

The Commission has identified workforce policies to make teaching more attractive system-wide, and particularly in high-need low-performing schools. These policies, which are designed to help develop capacity throughout the system, include: an induction program to support and increase the skills of teachers during their early teaching years; a meaningful professional development program and intensive mentoring tied to real classroom challenges; reductions in class size to allow for small group interactions and personalized teaching. These strategies will be implemented throughout the entire system and with great intensity in high-need and low-performing schools. They will ensure that teachers are provided with the tools and resources necessary to improve teacher performance and benefit student learning and achievement.

## Using Salaries as Incentives to Attract High Quality Teachers

### **RECOMMENDATION 2**

Provide all teachers with **salary incentives** of 3 percent (to be added to any negotiated increases), in order to begin to bring local salaries in alignment with the regional teacher labor market. To increase the number of qualified teachers in low-performing high-need schools, teachers in target schools will receive an additional 7 percent increase, or 23 percent for target schools on an extended-year calendar. \* Teachers who attain Master Teacher status, demonstrating high quality, will receive an additional 10 percent increase.

### **SPECIFICS**

- Teachers in New York City will receive a 3 percent across-the-board increase, independent of negotiated salary increases.
- All teachers in target schools with a traditional calendar who pass a performance-based assessment will receive an additional salary increase (on top of the 3 percent) of 7 percent. All teachers in target schools with an 11-month year who pass a performance-based assessment will receive an additional salary increase of 23 percent.
- All Master Teachers (teachers on the highest rung of the career ladder) will receive an additional salary differential of 10 percent and additional incentives of up to 5 percent for demonstrating competence in particular content areas. These include literacy, math and special education for grades K-12 and Regents test areas in grades 6-12. This will increase the number of exceptionally high performing teachers by providing them with salaries comparable to the highest in the State.

The City's current teacher salary system affords little flexibility to entice the most desirable candidates into the profession, or to encourage the best teachers to remain within it. Furthermore, because it rewards teachers without regard to the effectiveness of their teaching or the conditions in which they work, it does not provide districts or schools with the flexibility required to use pay to attract great teachers to challenging assignments.<sup>34</sup>

In deciding whether to enter and remain in teaching, individuals weigh the costs and benefits of the profession – in terms of salaries, working conditions and personal satisfaction – to other professions. Teachers are less likely to enter the K-12 education field and more likely leave it when they work in districts with lower pay and their salaries

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\* The 11-month school year will be discussed in detail in Part II of the Commission's report. The purpose is to help struggling students meet standards, through additional instruction provided during both an extended day and extended year. While it would be ideal for all high-need low-performing schools to operate on an 11-month calendar, staffing these schools with qualified teachers will pose recruitment problems. The Commission believes that the target schools should be divided into two groups: one operating on a traditional school calendar and the other operating on an extended year calendar. The Commission hopes that over time greater numbers of target schools will operate on an 11-month year, and teacher salaries will change accordingly.

are low compared to wage opportunities in other fields.<sup>35</sup> Policymakers must do what they can to increase the benefits and reduce the costs of teaching. Raising salaries is one option for increasing the pool of teaching candidates.

Hiring practices and salary increases must be structured carefully, however, if they are to lead to a higher quality workforce. Research supports the argument that pay increases must be coupled with higher standards to produce better educational results. Analyses of student achievement have found that student gains were associated with the use of resources to recruit teachers when those teachers had met higher standards.<sup>36</sup>

Salaries affect not only whether an individual chooses to be a teacher, but also in which district he or she chooses to teach. Starting salaries in New York suburbs are appreciably higher than in New York City, and the salary differential is even larger for more experienced and mid-career teachers. Furthermore, teacher salaries are appreciably lower than salaries in other knowledge-based industries, such as financial services and law. These labor market realities in New York City (i.e., a wage that is on average below the market in the larger New York City metropolitan area) contribute to teacher shortages generally and extreme shortages of quality teachers. These shortages are particularly acute in low-performing schools and in subject areas such as mathematics, science, and special education.<sup>37</sup>

***“We train them in the city public school system and as soon as there is an opening some of the really good teachers leave for Long Island and Westchester where the pay is better. I don't blame them.”***

***---- Nora, NYC teacher, Your Voice, Your Schools***

As Table 4 indicates, the median salary of a teacher in the Mid-Hudson region for the 2002-2003 school year was 18 percent more than the median salary of a New York City classroom teacher. The median salary of a teacher in Nassau-Suffolk was 24 percent more than the median salary of a New York City classroom teacher.

**Table 4**  
**Comparison of Classroom Teacher Salaries 2002-2003**

| <b>New York City vs. Surrounding Regions</b>       |                      |
|----------------------------------------------------|----------------------|
| <b>Region</b>                                      | <b>Median Salary</b> |
| <b>New York City</b>                               | <b>\$53,017</b>      |
| <b>Mid-Hudson</b><br>(Includes Westchester County) | <b>\$62,661</b>      |
| <b>Nassau-Suffolk</b>                              | <b>\$65,570</b>      |

An even closer analysis reveals the disparities by district. Table 5 shows that while 25 percent of teachers in a low-performing, high-need school in the Bronx made roughly \$39,000 annually, their counterparts in Bronxville were earning \$73,000. Meanwhile, a teacher in a similarly challenging school in Queens could at most earn only slightly above \$81,000, while his neighbor right over the county line in Manhasset looked forward to a salary over six figures.\* In 2003-2004, a Bronx teacher with five years experience earned \$45,506, compared to 23 percent higher salaries earned by teachers of similar experience in neighboring suburban communities. In Staten Island during the same time period, teachers with a Masters degree and seven years of experience earned \$47,922, compared to 26 percent higher salaries earned by their counterparts in surrounding districts.<sup>38</sup>

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\* These are 2002-2003 salary numbers.

**Table 5**  
**Classroom Teacher Salaries 2002-2003**

| <b>New York City Districts vs. Surrounding Districts Salary Percentiles<sup>39</sup></b> |                       |                        |                        |                        |                        |
|------------------------------------------------------------------------------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|
| <b>District (County)</b>                                                                 | <b>5<sup>th</sup></b> | <b>25<sup>th</sup></b> | <b>50<sup>th</sup></b> | <b>75<sup>th</sup></b> | <b>95<sup>th</sup></b> |
| 9 (Bronx)                                                                                | \$37,757              | \$39,237               | \$46,041               | \$64,049               | \$81,232               |
| Bronxville (Westchester)                                                                 | \$55,632              | \$73,082               | \$89,667               | \$98,090               | \$102,907              |
| 24 (Queens)                                                                              | \$37,757              | \$40,225               | \$51,585               | \$65,755               | \$81,232               |
| Manhasset (Nassau)                                                                       | \$52,458              | \$64,142               | \$86,679               | \$97,142               | \$100,891              |
| 4 (Manhattan)                                                                            | \$37,757              | \$43,972               | \$60,729               | \$69,359               | \$81,232               |
| Scarsdale (Westchester)                                                                  | \$57,454              | \$75,618               | \$95,326               | \$104,768              | \$111,806              |
| 23 (Brooklyn)                                                                            | \$37,757              | \$39,237               | \$45,506               | \$60,968               | \$81,232               |
| Great Neck (Nassau)                                                                      | \$46,388              | \$56,930               | \$81,168               | \$94,553               | \$99,710               |

Complicating the staffing issue further is the fact that the present allocation of salaries creates inefficiencies in the distribution of quality teachers.<sup>40</sup> The lack of coherent, structured incentives in current workforce policies passively encourages teachers to gravitate to high-performing schools with already strong, stable student achievement. With salaries equal across schools, there are no incentives for teachers to apply for more challenging assignments.

This situation leaves lower performing schools with weaker teachers, weaker leadership, and a weaker support system, resulting in an overall situation where students are left to struggle and schools stagnate.

Currently, New York City does not have a comprehensive, long-range plan to attract high quality teachers to low-performing schools. The major initiative to staff high-need positions and attract teachers to low-performing schools, the New York City Teaching Fellows Program, trains individuals without a teaching degree or teaching experience for seven weeks and then places many of them in low-performing high-need schools. Many Fellows find placements in high-need schools in the Bronx and central Brooklyn; over half of the June 2004 Fellows were assigned to these areas.<sup>41</sup> While the Teaching Fellows work in these schools they enroll in subsidized Masters of Education programs, with a majority attending City University of New York (CUNY) colleges. It takes most Fellows two to three years to obtain their MA.\*

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\* Fellows who leave the program early must pay back the amount paid on their behalf toward the Master's degree (<http://www.nyctf.org/prospective/fellowship.html>, accessed 12/15/04).

Although the program is a laudable attempt to increase the supply of qualified teachers working in high-need low-performing schools, the program has not provided the carefully designed incentives and support needed to systematically address the multiple challenges these teachers face. One of the results is that the three-year retention rate of Teaching Fellows is not much better than that of other beginning teachers in the system.\*\* This data makes it clear that providing short-term education incentives does not generate long-term results in retaining qualified teachers in low-performing high-need schools.

Efficient workforce policies, on the other hand, align teacher quality benchmarks with teacher salaries and link compensation with its priorities. As a major step in creating such policies, the Commission has designed a set of salary increases that will:

1. Entice more people with high teaching potential to enter the profession;
2. Convince effective teachers to remain in their classrooms;
3. Induce a larger number of excellent teachers to work in low-performing schools;
4. Enhance the capacity of teachers to use effective practices and increase their use of such practices; and
5. Encourage chronically ineffective teachers to leave teaching.<sup>42</sup>

The Commission recommends that New York City teacher wages be placed on par with the rest of the regional labor market. This means that salaries will need to be raised. This is a process that will take at least a decade to phase in. However, in the short-term, and with the infusion of funds from the CFE settlement, it is possible and necessary to take a first step in this direction by increasing teacher salaries by 3 percent above negotiated salaries.

In addition to these across-the-board increases, the Commission recommends that much bolder measures be taken to recruit and retain high quality teachers in the City's low-performing high-need schools. Salaries should be significantly raised for qualified teachers who work in these schools. Eligible teachers who work in target schools with a traditional school year will therefore receive, on top of a system-wide salary increase of 3 percent, an increase of 7 percent, with Master Teachers receiving at least 10 percent on top of that. Eligible teachers who work in target schools with an 11-month school year will receive, on top of the system-wide salary increase of 3 percent, an increase of 23 percent, with Master Teachers receiving at least 10 percent on top of that. The 7 percent received by teachers in traditional and 11-month year target schools is an incentive. The additional 16 percent for teachers in the 11-month year target schools is pro-rata compensation pay for four weeks a year and 20 minutes a day of additional instruction.\*

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\*\* The UFT reports a 42 percent three-year attrition rate for beginning teachers, in contrast to a 38 percent three-year attrition rate reported by the Teaching Fellows program. Retention rates for Fellows are 80 percent at the end of Year 2 and 62 percent at the end of Year 3. Only 52 percent completed Year 4 of teaching (<http://www.highered.nysed.gov/ocue/atcregentsreportOct04.htm>, accessed 3/28/05).

\* The extended year should be distinguished from summer school, which does not provide continuity in instruction. The extended day/year will be discussed in detail in Part II of this report.

The salary increases are based on research showing that districts around New York State have not paid salary differentials sufficient to compensate for difficult working conditions, and as a result, the best teachers have chosen not to teach in low-performing, high-need schools.<sup>43</sup> While no one knows precisely how large salaries must be to offset challenging working conditions, recent studies of teacher quality and low-performing schools have noted that the incentives for selecting a challenging assignment will need to be significant.<sup>44</sup>

The raises the Commission recommends will put teacher salaries in the target schools on par with salaries in the rest of the regional labor market. Since these schools are some of the most challenging schools in the State (and in the nation), it makes sense that high quality teachers who work in these schools should be paid at least as much as teachers instructing high achieving, advantaged students in neighboring areas such as Westchester, Suffolk, and Nassau.

The Commission's recommended salary schedule will not only offer a strong and attractive incentive for high-performing teachers, but also a good deal for the system, which will provide the highest salaries to the best teachers who work in the toughest schools.

**Table 6**  
**Proposed Salary Schedule for Master, Career and Novice Teachers**

|                       | <b>Qualifications &amp; Experience</b>                                                                                                                                    | <b>Responsibilities</b>                                                                                                                                                                                                 | <b>Salary in Non-Target Schools**</b>                     | <b>Salary in Target Schools with 11-month year</b>       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|
| <b>MASTER TEACHER</b> | Min. 3 years teaching<br><br>Tenured<br><br>Passed a competitive exam that evaluates knowledge, skill, leadership, and ability to teach both fellow teachers and students | Support other teachers' learning and instruction through service as one or more of the following:<br><br>--Instructional coach<br>--Model classroom teacher<br>--Co-teacher with interns<br>--Mentor to Novice Teachers | \$50,997-92,036<br><br>\$53,547-96,638 for specialists*** | \$62,726-113,204<br><br>\$65,862-118,864 for specialists |
| <b>CAREER TEACHER</b> | Min. 3 years teaching<br><br>Passed rigorous tenure exam (given after third year of teaching)                                                                             | Co-teaching with interns and working with students in need of individual interventions<br><br>Engage in continuous individual and group assessment to improve knowledge, skills and practice                            | \$46,361-83,669                                           | \$57,024-102,913                                         |
| <b>NOVICE TEACHER</b> | 0-3 years teaching<br><br>Completed induction process and fulfilled tenure requirements                                                                                   | Work towards completing the induction process, fulfilling tenure requirements, developing more advanced skills in instruction and classroom practices                                                                   | \$40,170-51,292                                           | \$49,409-63,089                                          |

\*\* Novice Teacher salary calculations are based on a salary range of \$39,000-\$49,798. \$39,000 is the starting salary for an individual with a B.A. and less than six months of teaching experience; \$49,798 is the salary of an individual with an M.A. and 3 years experience + 30 credits. Career Teacher salary calculations are based on a salary range of \$45,011-81,232. \$45,011 is the starting salary for an individual with an M.A. and three years of experience; \$81,232 is the highest point in the salary schedule, for an individual with an M.A. + 30 credits and 22 years of experience. Master Teacher salary calculations are 10 percent above the Career Teacher salaries, and then 5 percent above that in the case of specialists. Calculations do not include fringe benefits. All current teacher salaries come from <http://www.nycenet.edu/TEACHNYC/CareerChangers/Salary+Calculator.htm> and <http://www.nycenet.edu/offices/dhr/payroll/ssct.aspx> and are based on 2002-2003 salaries.

\*\*\* Master Teachers who demonstrate competence in particular content areas such as Literacy, Math and Special Education for grades K-12 and Regents Test areas in grades 6-12.



## Tying Teacher Compensation to Knowledge and Skills

### **RECOMMENDATION 3**

Shift the rationale for teacher compensation from solely years of experience to knowledge and skills. Linking compensation to knowledge and skills will increase the number of highly effective teachers throughout the system.

#### **SPECIFICS**

- Utilize and adapt nationally recognized salary proposals that reimburse teachers based on responsibilities undertaken, professional growth, standards-based evaluations, and classroom performance.
- Develop a local, knowledge and skills-based salary schedule that is built around the New York City context, takes into consideration local interests, and encompasses the Career Ladder. The DOE and the UFT will negotiate the new basis for the salary schedule. The Independent Institute will facilitate the process by providing both parties with relevant research and valid and reliable instruments.\*
- Remove the requirement for a “Masters degree plus an additional 30 credits” as the mechanism for reaching the highest point in the salary schedule. Replace it with a system in which the highest point is reached either by obtaining Masters degrees associated with greater teaching skill, such as reading, special education or mathematics, or by passing an appropriate assessment that measures the quality of the knowledge and skills obtained and its relevance to teaching and learning.
- Collect and analyze data in order to measure the impact of staffing incentives, both financial and otherwise, on the recruitment and retention of high quality teachers in the target schools. The Independent Institute will conduct this work.

The salary schedule will shift the emphasis for teacher compensation from years of experience to knowledge and skills. Although years of experience should be acknowledged in the compensation system, mere survival should not be the primary basis for advancement on the salary schedule. Through the Commission’s recommendations, a substantial percentage of salary increases will be tied to the receipt of satisfactory evaluations on standards-based evaluations that include classroom performance. In short, the criteria used to determine teachers’ salaries must change from the current system, based on seat time and years of experience, to a new structure based on demonstrated knowledge and skills and the impact they have on student achievement.

The salary reforms will also encourage teacher education and preparation in subjects that are directly aimed at improved knowledge and pedagogy in teaching areas (e.g., reading, special education, mathematics or mathematics education, bilingual education or TESOL), as they discourage the obtainment of degrees in fields that do not have a direct link with student learning and achievement. Salary bumps will not be given

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\* See discussion of the Independent Institute.

to teachers simply for obtaining a Masters and additional credits in any subject, as additional graduate degrees and coursework are not automatically linked with student achievement.<sup>45</sup> There will also be more rigorous oversight over where a teacher can obtain a Masters degree in order to move up in the salary schedule. The salary schedule may additionally be used to provide special incentives for teachers to extend their skills in shortage fields such as special education or mathematics by providing additional pay for training or credentials for teachers in those subjects.

### *Career Ladder and Master Teachers*

#### **RECOMMENDATION 4**

Create a Career Ladder with three rungs, Master, Career and Novice. This will create incentives and opportunities for teachers to become more skilled, to assume additional responsibilities, to remain within the teaching profession, and to advance teacher quality throughout the system.

#### **RECOMMENDATION 5**

There will be one Master Teacher for every 500 students system-wide, with a maximum of three Master Teachers per school. For every 250 students in the target schools, there will be one Master Teacher, with no limit on the number assigned per school. This will guarantee that Master Teachers' expertise is available to every school in the system and that instructional support is of the highest quality.

#### **SPECIFICS**

- Novice Teachers will have 0-3 years of experience. They will be responsible for successfully completing the induction process, fulfilling tenure requirements, and developing more advanced skills in instructional practice and mastery of content.
- Career Teachers will be so designated after passing a rigorous assessment and receiving tenure at the end of their third year of teaching. Their additional responsibilities will include co-teaching with interns and working with students in need of individual interventions. They will be involved in the improvement of teaching at the school level and engage in individual and group assessment and improvement of their knowledge, skills and practice.
- Master Teachers will be so designated after receiving tenure and passing a rigorous, challenging assessment that evaluates a teacher's knowledge, skills, leadership qualities and ability to teach both fellow teachers and students. This position is designed to provide opportunities for the system's most qualified teachers to support other teachers' learning and instruction and to engage in professional advancement, growth and leadership while remaining in the teaching profession. Master Teachers will be trained to take on responsibilities in one or more of several areas: instructional coaching, serving as model classroom teachers, additional co-teaching with interns, mentoring Novice Teachers and continuously developing the instructional program.

The existing structure in New York City does not give teachers enough opportunities to learn, improve, and advance. Research on teacher recruitment, retention and development suggests that to get, keep, and develop a strong teaching force, there must be opportunities for learning and skill development. In their early careers, opportunities for continued learning under close supervision and coaching help new teachers develop crucial skills and reduce attrition. Later in their careers, opportunities for professional development and collaboration with other teachers are associated with staying in teaching and becoming more effective over time. At all levels, quality teachers respond to opportunities to expand their knowledge of content, pedagogy and practice, to build on what they know in an effort to improve their own practice as well as student achievement and learning, and to excel at their chosen profession. Yet, opportunities for promotion and new career opportunities are generally limited for public school teachers who want to stay in the classroom.<sup>46</sup> Most promotions available to teachers tend to result in less time being spent in the classroom, for example, by becoming a school administrator.

In response to this issue, the Commission proposes the creation of a career ladder that teachers will ascend based on their performance in a series of standards-based assessments. In preparing for each of these assessments, teachers will have numerous opportunities for learning and sharing their skills with both teachers and students. Novices will be mentored and work towards successful completion of a rigorous tenure exam. Career teachers will engage in school or department level work as well as their own instructional improvement and work with individual students in need of intervention. Master Teachers will consist of a select group of highly qualified, experienced teachers with demonstrated teaching abilities and expertise in particular areas, such as math and literacy. Depending on their particular skills, they will engage in a combination of mentoring new teachers, coaching experienced ones, and teaching in low-performing schools. All teachers will collaborate, formally and informally, through shared planning time and other professional development activities, to develop their practice. By focusing career advancement around knowledge and skill, teachers will be encouraged to develop their own practice and abilities.

***“Improving teacher quality will require providing serious incentives for our best and brightest to enter the profession, including...more competitive professional compensation and benefits, better working conditions, and substantive professional development opportunities. Do our elected leaders have the necessary political will to make this happen? Do we have the courage of our convictions to insist that they do?”***

***----Patricia, Your Voice, Your Schools***

Finally, the career ladder aligns incentives and performance, so that educators are recognized and rewarded for consistent, high quality instruction, rather than for hours towards an advanced degree, while providing needed remediation or termination to those who receive an unsatisfactory assessment.

The high point of the career ladder is the position of Master Teacher, which is roughly analogous to certification by the National Board for Professional Teaching Standards (National Board). National Board certified teachers have been shown to have a strong positive impact on student achievement.<sup>47</sup> By itself, National Board certification does not improve an experienced teacher's practice or performance; teachers are good both before and after they become certified. What it does do is help to identify good teachers, and allow school districts that lack highly qualified and experienced teachers to attract them by offering incentives. When coupled with incentives, National Board certification has the potential to encourage improved performance from teachers by giving ambitious and talented individuals a goal to work towards.

New York, unlike many other states, does not currently provide statewide financial salary incentives or supplements for National Board certified teachers.\* Within New York State, cities and towns have taken independent steps to incentivize and reward teachers' participation in the program. These incentives generally consist of stipends to cover the \$2,300 fee and/or salary increases of between \$1,000 and \$5,000, on a one-time or annual basis. In New York City, for example, the UFT contract provides that National Board certified teachers qualify for a salary differential of approximately \$3,700 (which the majority of teachers obtaining this certification already possess). These efforts, which have produced more than 40,000 National Board certified teachers nationwide, have resulted in only 480 National Board certified teachers in New York State, and many fewer in New York City. Of the 83 teachers from New York State receiving National Board certification in 2004, only 18 teachers – less than 22 percent – were from New York City schools.<sup>48</sup>

*There are over 40,000 National Board certified teachers in the United States.  
There are only 97 in New York City.<sup>49</sup>*

The career ladder, like the National Board certification process, will identify good teachers. By creating the position of Master Teacher, the system will be able to identify, reward, and retain the best teachers in the City's schools, and recruit many of them for the lowest performing schools. The career ladder will institutionalize the development of strong teachers throughout the system by incorporating the certification process into position classification and salary scale. The career ladder will be able to take the high standards required for professional advancement and embed them throughout the entire school system.

The principal is and will continue to be the key leader of a school, responsible for supervision and evaluations of all staff at the school site. Master Teachers are not intended to replace the role of assistant principals, and our recommendations here are not intended to and do not change those roles. Master Teachers will be supervised and evaluated by principals and other supervisors. The Commission believes that reform at the classroom level requires rebuilding of authority at the school level, for both teachers

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\* The State does provide up to \$2,500 in Albert Shanker certification grants and a state candidate fee subsidy to offset the registration cost for the National Board program.

and supervisory staff. It is the principal who has the ultimate responsibility for the school building.

Expert veteran teachers who qualify as Master Teachers will serve as linchpins of the reform process in several ways. As mentors for Novice Teachers, they will serve as role models and coaches to ensure that new teachers learn to teach well and receive the support they need to continue teaching. As instructional coaches for other teachers, they will help to strengthen teaching practices in schools across the City. Master Teachers will work in specific disciplinary areas, such as literacy, mathematics, and science, to demonstrate effective practice and support other teachers in planning, learning instructional techniques, and assessing learning. In this capacity, in the target school there will be one Master Teacher for every 250 students, with no maximum. In the rest of the system there will be one Master Teacher for every 500 students, with a maximum of three per school.

Master Teachers are particularly important for low-performing schools. There they will utilize their experience as teachers and their high level of instructional knowledge to educate students in low-performing schools, students who have all too often been deprived of the highest quality teaching. More experienced teachers, including those who serve as mentors, are stretched thin by the needs of their colleagues as well as their students.<sup>50</sup> Scarce resources are wasted trying to re-teach the basics each year to teachers who arrive with few tools and leave before they become skilled.<sup>51</sup> Instead, the constant staff turnover consigns a large share of children to an endless parade of relatively ineffective teachers. Master Teachers will reduce this attrition by serving as a major support for Novice and Career Teachers, a support that teachers in low-performing schools lack and cite as reason for leaving. They are not intended to and will not serve in a supervisory capacity.

As Master Teachers are so important to retaining new, quality teachers as well as developing experienced ones, there will be a concerted effort to recruit a critical mass of Master Teachers to high-need target schools. Teams of Master Teachers, along with skilled principals, will be recruited to redesign low-performing schools and, in some cases, reopen target schools, which will serve as models for the rest of the City.

## Standards-Based Teacher Assessments

### **RECOMMENDATION 6**

Set and enforce high professional standards through a comprehensive assessment system to screen teacher candidates, evaluate teachers' classroom performance and pedagogical and content knowledge, strengthen tenure requirements, and evaluate Master Teacher candidates. Rigorous teacher assessments will ensure that only high quality teachers enter and remain in the system, progress up the career ladder and receive salary increases.

#### **SPECIFICS**

- Create a comprehensive assessment system that will evaluate teachers' skills, knowledge, performance and qualifications at several points in their careers: as part of the application process, tenure requirements, Master Teacher certification, and as a factor in determining a teacher's place in the salary schedule.
- Develop a series of assessment criteria to select all incoming teachers who wish to work in the target schools, as well as all established teachers who wish to remain in the reopened target schools.
- Build a transparent, efficient and objective application process that will enable the timely placement of qualified teachers in the target schools.
- Develop an evaluation through which the knowledge and skills of teachers in target schools will be regularly measured.
- Establish a meaningful tenure system by developing a three-year set of requirements following entry into the profession, including passing annual evaluations and submitting a professional portfolio. Shift the burden of responsibility from education officials having to demonstrate teacher inefficacy to the teacher having to prove efficacy.
- Create a thorough assessment to determine whether an individual is qualified to serve as a Master Teacher and the particular areas she/he should focus on. Teachers will be directly observed in their teaching, interviewed about their strategies for teaching and supporting the learning of other teachers, and evaluated through locally developed assessments or analogous ones such as the National Board for Professional Teaching Standards.

The educational system needs a set of objective tools for measuring teacher performance. These tools will allow the system to foster and reward quality teaching and steer poorer teachers out of the classroom. The lack of attention paid to teacher performance in New York City is particularly prevalent in low-performing schools where rapid teacher turnover and late hiring prevent the utilization of adequate screening for high standards. With the use of additional CFE funds to attract significant numbers of quality teachers into the system, this situation can, and must, be reversed.

In order to distribute salary incentives to highly qualified teachers and implement a career ladder based on continuous improvement, a standards-based assessment system that evaluates individual teachers' development must be put in place. Such a system will

ensure that only quality teachers enter the system, and only quality teachers will be rewarded with additional salary increases and responsibilities associated with tenure and mentor and Master Teacher status.

Standards-based assessment systems, when properly established and implemented, are a powerful way to evaluate teacher quality and make determinations about it. In a study of three districts that utilize such systems, researchers found positive correlations between teachers' ratings and their students' gain scores on standardized tests.<sup>52</sup> In addition, several recent studies of teachers who have achieved National Board certification have found that those teachers whose work was evaluated through a standards-based assessments system were more effective with students, as evaluated by gains in their students' learning.<sup>53</sup> These results led researchers to conclude that connecting pay to demonstrated knowledge and skill is a tenable way to improve student performance.<sup>54</sup>

Standards-based assessment encompasses professional accreditation and state licensing, but goes beyond these two elements. It is a rigorous mechanism for judging teachers' qualifications, knowledge and skill before and after they enter the educational system. It highlights both when teachers successfully engage in appropriate professional practice as well as when they fail to do so. Additionally, by requiring teachers to regularly undergo challenging evaluations, high standards become embedded throughout the system.

In a strong standards-based assessment system, teachers and school leaders' performance is evaluated against both accepted standards of professional practice and goals set for students, teachers and school leaders by the system. At the classroom level, a quality teacher must display competence and growth in a variety of areas over time, including practice and student learning. For example, a teacher might be assessed on her ability to elicit student discussion and develop instructional materials as well as her lesson planning and communication skills. At the school level, principals are responsible for conducting teacher evaluations and working with them to improve practice. Principals also provide professional development and other instructional resources to their teachers to support improvements in teaching and learning.

To ensure that principals and teachers have the capacity to meet high standards, the system must do its part by providing them with a variety of quality resources for teaching students and improving their teaching skills.\* It must also make every effort to ensure that the goals and standards established are reasonable ones that take into consideration the varying skill and need levels of students in each school. The goal of such standards is to encourage higher performance from teachers and students across the system, not to encourage teachers to teach only students who they believe can meet standards, while ignoring poorer performers.

The Commission recommends a series of integrated, rigorous assessments that reflect the increased knowledge and skills teachers are expected to obtain over the course

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\* See discussion of Professional Development

of their careers. The assessment system will serve as the primary mechanism to judge teacher competence and growth, particularly at three levels: Novice, Career and Master.

**Novice Teacher assessment.** The purpose of the Novice assessment process is to see how applicants perform along a variety of dimensions. Points of interest include applicants' student teaching experience, recommendations from teachers who observed their teaching, a demonstration lesson, the subject matter they have prepared in, whether they have any special education preparation or experience and whether they have bilingual education training and experience.

The Novice assessment may also be used in placement decisions. Because of the variety of incentives offered, the Commission expects a large number of applicants for the target schools, far exceeding the number of positions available. This makes it extremely important that, before the low-performing schools are staffed, a strong application process is put in place. The application should also gauge teachers' ability to work with low-performing students and in a collaborative environment. The application should make every effort to ensure that qualified teachers only are placed in low-performing schools and teachers are matched with schools that will benefit from their strengths and where they will enjoy working. The application should ensure that there is a good fit between incoming teachers and the school leadership, as well as with other teachers in the school.

**Career Teacher assessment** will serve as the mechanism to decide whether Novice Teachers move up the career ladder to the Career Teacher position. Teachers who do not pass this assessment will not be allowed to move up the career ladder and receive accompanying salary increases.

This assessment will build on well-validated performance assessments for beginning teachers that directly measure teaching skills and have been shown to be associated with teacher effectiveness.\* This approach to preparation for tenure has several benefits. First, it makes clear what good teaching looks like and provides a meaningful benchmark for Novices and their mentors to work toward. Second, it provides an authentic, valid and reliable evaluation tool for the important tenure decision.

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\* Examples include those currently used in Connecticut (the BEST assessment) and in California (the PACT assessment). These portfolio assessments are grounded in the teaching of specific subject areas (and, for elementary teachers, the teaching of literacy, mathematics and scientific and social scientific inquiry). These models evaluate a teacher's planning, instruction, assessment of student learning, and ability to reflect on and adapt instruction. They involve teachers in planning a standards-based unit of instruction and justifying their plans; teaching that unit and reflecting on each day of instruction in order to make necessary changes; collecting and analyzing evidence of student learning for the entire class and for two students over time; and reflecting on student learning and changes in the unit they would make in the future. Finally, trained assessors score a portfolio that includes teacher plans and assignments, videotapes of teaching, student work samples with teacher feedback, and reflections on teaching and learning.



Third, it can help to develop and spread shared norms of practice throughout the teaching force. Over time, most teachers in the district will have participated in the tenure assessment process, as mentors work to support new teacher learning around standards of practice reflected in such a performance assessment, as new teachers prepare for such an assessment, and as veteran teachers are involved in assessing these performances. This allows good teaching to be better understood and disseminated throughout the system.

**Master Teacher assessment** will be modeled on the process through which teachers achieve National Board Certification. The assessment will examine teachers' subject and pedagogical knowledge, and require them to demonstrate their skills and professional judgment in the classroom. As with the National Board exam, the Master Teacher assessment will look for "teacher's ability to set high and appropriate goals for student learning, connect worthwhile learning experiences to those goals, articulate the connections between the goals and the experiences, analyze classroom interactions, student work products and their own actions and plans in order to reflect on their practices and continually renew and reconstruct their goals and strategies".<sup>55</sup> The Master Teacher assessment will also examine the ability of candidates to reflect on their own teaching. As the National Board notes, "They must provide insight into not just what is happening in their classroom, but the rationale for those events and processes".<sup>56</sup> Since Master Teachers will be teaching fellow teachers, the assessment will also determine their ability to educate adults. They will be required to systematically analyze teachers' work, and particularly their handling of instructional issues, assignments, class-work and assessments.

**Knowledge and Skills assessment.** In order to climb the salary ladder, all teachers will need to successfully participate in a periodic knowledge and skills assessment. Research shows that student learning is higher when teachers have a few years of experience, but additional experience does not consistently lead to additional increases in teachers' contributions to student achievement.<sup>57</sup> Periodically assessing teachers for knowledge and skills as prerequisite for salary schedule increases will help ensure that teachers continuously acquire and demonstrate critical subject matter information and instructional strategies needed to improve student performance.

In designing a pay for skills and knowledge system, it is important to measure skills carefully, or standards will be diluted over time and the system will produce no more benefits than the old system of pay for experience.\* As much as possible, the focus must be on evaluating a teacher's daily practice, such as the ability to informally assess student progress and learning and address gaps in it. Performance can encompass teaching and be defined and measured in several ways, including a teacher's ability to regularly assess students and provide timely, constructive information that will enable them to improve as well as a teacher's ability to work with colleagues and the rest of the

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\* For a discussion of the use of value-added methods (VAM) in teacher assessment, see the section on Professional Development, later in this report

school community to address students' learning needs. It does not and cannot refer solely to student achievement tests.

Finally, it is important to note that the system's capacity to do these kinds of evaluations will need to be built up over time. The assessments will need to be carefully designed and tested before being introduced throughout the system. All teachers currently in the system will continue under the old assessment system. The phase-in of the new standards-based assessment system for Novice, Career, and Master Teachers will begin with teachers in the target schools, teachers new to the system and current teachers who volunteer to participate in it.

## Support for the Early Teaching Years

### **RECOMMENDATION 7**

Embed in every school a comprehensive teacher support package that connects on-the-job learning to meaningful performance assessment. Providing teachers with the support during their early teaching years will make them more effective and reduce the likelihood of their leaving the profession

#### **SPECIFICS**

- Reduce mentor: teacher ratios from 1:17 to 1:10 system-wide, and to 1:5 in target schools.
- Give teacher in schools system-wide one year of mentoring, to be followed by an assessment. Give teachers in the target schools two years of mentoring, which will be accompanied by assessments at the end of the first and second years.
- Train mentors to assist first and second year teachers in passing induction-related performance assessments.
- Provide Novice Teachers with in-school support by assigning to them mentors familiar with the local school context, who work either in the Novices' schools or in schools with similar demographics and characteristics. Provide Novice Teachers in secondary schools with mentors who have the same subject matter expertise.
- Reduce Novice Teachers' workloads during their first two semesters of full-time teaching. In elementary schools, novices will have, in addition to the current daily prep period, one assigned non-teaching period per day. In secondary schools, Novices will teach four instead of five classes per day. The additional period will be used for shared planning time and collaboration with Career and Master Teachers.
- Use Master Teachers to serve as mentors.

Given the challenges of the early teaching years, it is not surprising that teacher turnover is highest for beginning teachers, a third of whom quit their schools within their first three years on the job. By Year 5, the attrition rate has risen to 40 percent, with the highest attrition rates within rural and urban inner-city schools.<sup>58</sup> New teachers generally assume the same responsibilities as 20-year veterans. In doing so, they are forced to manage multiple variables, including student behavior, intellectual engagement, student interaction, materials, physical space, and time. While many Novice Teachers have had excellent intellectual preparation and student-teaching opportunities, their limited experience generally yields an "equally limited repertoire of classroom strategies," far more limited than the variety of teaching challenges a new teacher invariably encounters. The situation is one that is "ripe for frustration and failure".<sup>59</sup>

Lack of teacher retention in public schools is a major hindrance to sustaining teacher quality. The "revolving door creates a permanent core of inexperienced teachers who are learning their craft by, essentially, practicing on the students before them".<sup>60</sup> Churn amongst novices also reduces overall education productivity, since teacher

effectiveness rises sharply after the first few years in the classroom.<sup>61</sup> High teacher turnover drains energy and resources, “requiring that administrators and teaching colleagues constantly focus on bringing newcomers up to speed on everything from operating the copy machine to participating in major reform efforts”.<sup>62</sup>

Fortunately, there are proven methods for increasing teacher retention. The amount of assistance a school offers new teachers is a key determinant to whether they intend to stay in teaching. First-year teachers who participate in yearlong induction programs with mentors are twice as likely to remain in the teaching profession as teachers without this support system.<sup>63</sup> In fact “new teachers enter the profession with a tentative commitment to teaching and decide whether to continue teaching based on the support they receive at the school site and the success they experience with their students”.<sup>64</sup>

Well-designed mentoring programs do not just improve retention rates for new teachers, but also their attitudes, feelings of efficacy, and instructional skills.<sup>65</sup> Initial findings from recent mentoring program evaluations in Texas and California suggest that the costs associated with induction can be recovered by lower attrition rates, “which reduce the cost of hiring, orienting and evaluating new teachers”.<sup>66</sup>

Not just any mentoring program will accomplish these goals. Effective programs must incorporate high-intensity supports (e.g., preparing novices for an assessment or working with them in class), as opposed to low-intensity supports (e.g., providing formal orientation or protecting new teachers from extracurricular responsibilities).<sup>67</sup> High quality programs:

- provide Novice Teachers with opportunities to observe and analyze good teaching in real classrooms, with real teachers and real students;
- assist Novice Teachers in transferring the acquired knowledge, skills and beliefs and attitudes needed to improve student learning;
- provide Novice Teachers with on-going guidance and assessment by an expert in the field, who has been trained as a mentor;
- reduce Novice Teachers’ workload to provide more learning time;
- assist Novice Teachers, through mentor support, in their efforts to meet licensure standards;
- include rigorous evaluations that determine the effectiveness of the program and provide information that can be used to continuously improve the program;
- invest in rigorous new-teacher assessments that examine development and performance; and
- create a rigorous process for selecting mentors.<sup>68</sup>

In low-performing high-need schools, which often have more challenging working conditions than other schools, an induction process that assists new teachers in dealing with the myriad instructional and other challenges they face is particularly important. Beginning teachers in low-performing schools need a richer induction program, and particularly a smaller mentor-novice ratio. “For these schools there is increasing evidence that induction programs with well-designed assessment and support

components are one of the most effective ways to retain new teachers. Such programs support novices while they develop the knowledge and skills that make them effective teachers of high need low performing students...Such skills are best learned on the job under the guidance of a trained mentor”.<sup>69</sup>

New teachers in low-performing schools are less likely to have quality induction programs than their counterparts in more advantaged schools, despite the fact that low-performing schools experience higher turnover and are staffed with a larger percentage of inexperienced teachers.<sup>70</sup> In addition, low-performing schools tend to have mentoring that focuses more on teaching to the test and narrow curricular issues, rather than broader intellectual inquiry. The lack of quality induction in low-performing schools is frustrating and contributes to teachers leaving for better performing schools.<sup>71</sup>

New York City has a mentoring program for new teachers. The mentor-teacher ratio of 1 mentor to 17 teachers is so high, however, that mentors cannot provide new teachers with the support they need in terms of critical self-reflection, teaching practice, and personal and emotional support.

In light of the need for a comprehensive induction program, the Commission recommends a lower mentor-novice ratio so that the time mentors spend with Novice Teachers will be meaningful. Since it is more important to have intensive contact with a mentor for one year than infrequent contact with a mentor for twice as long, mentors will continue system-wide to work with Novice Teachers for one year, with the lower mentor–novice ratio providing significant opportunities for in-depth work and feedback. Also, elementary schools should make every effort to match mentors with Novices who are in the same school or in a school with a similar demographic profile. At the secondary school level, it is important to match Novices and mentors based on subject area. Finally, the Commission recommends that Novice Teachers be required to participate in structured time during which they collaborate with other teachers, work with Master teachers, and participate in continued learning opportunities within their schools.

In the target low-performing high-need schools, the Commission recommends a more intensive mentor-teacher ratio of 1:5. Additionally, in the target schools, where novice teachers face a wider array of teaching challenges, the induction process will last two years. In order to ensure that the induction system helps teachers to achieve high standards, it will be closely aligned with the assessment system. Novice Teachers, regardless of their prior training, have a great deal to learn during their first months and years of teaching. They need to have their strengths and weaknesses evaluated on a regular basis, and they need assistance developing strategies that will address problem areas.<sup>72</sup> Teachers in target schools will demonstrate knowledge acquired over the course of the induction period by taking an assessment at the end of the first and second year.

By linking induction to the assessment process, Novice Teachers will be presented early in their career with a consistent set of norms, practices, and expectations that are relevant to their future work. Induction thus becomes about more than just

surviving the first year of teaching, but about preparing for the upcoming years and learning strategies and practices that will result in long-term improvements in teaching.

To ensure that the induction program makes a meaningful difference in teachers' lives, mentors must be well trained. If mentors "are to operate as anything more than buddies or cheerleaders, they must be chosen carefully, receive appropriate training, and be given adequate time away from their own classroom responsibilities".<sup>73</sup> The Commission recommends that Master Teachers serve as mentors throughout the school system. With new assessment systems in place, Master Teachers will have proven they possess the knowledge and skills necessary to be quality mentors.

## Professional Development

### **RECOMMENDATION 8**

Focus teacher learning on content and higher-order thinking, tie professional development directly to instruction and classroom practice, and recruit and train highly competent personnel to conduct all professional development activities. By creating a comprehensive professional development program, the system will promote and integrate continuous inquiry and improvement in the daily life of schools.

### **SPECIFICS**

- Evaluate the professional development programs, both on and off-site, offered to DOE teachers. The Independent Institute, which will conduct this evaluation, will examine all programs for their ability to advance teacher learning, improve teacher practice, and increase student achievement. The Independent Institute will determine which programs are high quality and should continue and which programs are of poor quality and should be jettisoned.
- Utilize value-added methods (VAM) to evaluate and improve professional development. By using information generated from VAM to inform the design of professional development programming, the programming can be better tailored to the particular needs of teachers.
- Create a professional development plan for every teacher in the school system using VAM.
- Plan and implement a value-added experiment, with the assistance of the Independent Institute, to determine how VAM can be incorporated into the standards-based assessment system.
- Provide schools with necessary resources to give teachers an additional one hour a week of professional development, buying time for a flexible menu of methods inside and outside schools. The allocation, which will provide individual, group and school-wide professional development, is not intended to reduce teacher class schedules. Schools will buy time for activities such as teacher intervisitation, teacher modeling, planning lessons, and curriculum development.
- Utilize Master Teachers as instructional coaches.
- Increase the number of coaches system-wide from one math and one literacy coach per school to one literacy coach per 750 students (with a maximum of 3 per school) and one math coach per 1000 students (with a maximum of 2 per school). In the target schools, increase the number of coaches from one math and one literacy coach per school to one literacy and one math coach per 500 students, with no cap based on school size.
- Increase literacy and math coaches' efficacy through a professional development program designed for them.

Professional development refers to the ongoing learning opportunities available to teachers and other education personnel through their schools and districts. These programs provide educators with the preparation and support they need to help all students achieve high standards of learning.<sup>74</sup>

Teacher commitment and retention are partly associated with high-quality professional development and opportunities in collegial work settings.<sup>75</sup> In addition, teachers' practice and effectiveness improve as they participate in intensive curriculum-based professional development with other teachers, during which they study curriculum and teaching strategies.<sup>76</sup>

Effective professional development, or programs and practices that produce changes in teachers' classroom-based instructional practice, which can in turn be linked to improvements in student learning, does not exist on a systemic basis in New York City.<sup>77</sup>

Traditionally, professional development has been delivered to teachers as a series of independent workshops. These workshops, mostly delivered by outside consultants, are not integrated with one another and are generic in their pedagogical and content focus. Teachers typically listen to a lecture, delivered at the beginning or end of the school day, which ranges from 20 to 60 minutes, followed by a brief survey on the lecture's value. The information is not connected to particular curricula, grades or schools, nor is there any effort to discern if and how teachers use the information in the classroom or the impact it has on achievement.

For years, education researchers have argued that this model of professional development fails to take into account the complexity of teachers' work, lacks continuity and coherence, provides little in the way of on-going, in-school, content-based education, and misconceives the way adults learn.<sup>78</sup> In addition, its generic nature means that it cannot address the challenging conditions found in urban, low-performing schools with diverse student bodies.

This assessment is shared by the vast majority of New York City teachers and education experts, who argue additionally that the programs provided are of poor quality; the people providing it are unqualified and untrained; programs are not scheduled or budgeted in a timely, efficient manner; content has little relevance to their daily work, problems and questions; and there is no system understanding of which programs work and which do not.<sup>79</sup>

According to the U.S. Department of Education, effective, quality professional development programs are ones that:

- focus on individual, collegial, and organizational improvement;
- reflect best available research and practice in teaching, learning, and leadership;
- enable teachers to develop further expertise in subject content, teaching strategies, uses of technologies, and other essential elements in teaching to high standards;



- promote continuous inquiry and improvement embedded in the daily life of schools;
- are planned collaboratively by those who will participate in and facilitate that development;
- require substantial time and other resources;
- are driven by a coherent long-term plan;
- are evaluated ultimately on the basis of their impact on teacher effectiveness and student learning, and are revised based on this assessment.<sup>80</sup>

The purpose of the Commission's recommendations is to embed high professional development standards in New York City. Through the above recommendations, New York City can develop a professional development system in which teachers are continuously learning and able to apply what they learn in the classroom; and system and school leaders support and spearhead innovative, on-site professional development through implementation of best practices, particularly in the fields of math and literacy.

### ***Evaluate Professional Development Programs***

Currently, in New York City there is a wide array of professional development programs that take place at the school, region and system level, and new programs are regularly being purchased. While there is a great deal of anecdotal evidence that provides a glimpse into the effectiveness of these programs, there is no systematic, data-driven knowledge about their quality and effectiveness available to teachers, administrators, principals, or the general public. The individuals selecting professional development programs do not have information about what works and what does not, let alone any information on whether a specific program meets the needs of their particular region, district, or school.

The Commission recommends that the Independent Institute perform an evaluation of existing programs to assess what works and what does not. Before adding yet more new programs and vendors to the system, it is important to build on and support what works. All too frequently, new initiatives displace ongoing work before it has had time to bear fruit and before it can be studied, refined, and improved. Knowledge is never allowed to accumulate in systems that continually start anew. Submitting programs to cycles of evaluation and refinement will build on existing resources, ensure that New York City schools will benefit from good work already under way and will enable the system to discontinue initiatives that are not working.

### ***Utilizing Value-Added Methodology for Professional Development***

Educators and policymakers have long been interested in using evidence about student learning to understand the influence of teaching. With the advent of large-scale data sets that can make connections between students' test scores and teachers' impact on

them, it is now possible to track the “value added” of teachers’ contributions, the degree to which their teaching increases student achievement.

The value-added method (VAM) is a statistical procedure that measures the effectiveness of schools and teachers based on the amount of academic progress their students make from one year to the next. It uses student test score data collected over a period of time to measure the change in a student’s performance during a specific period of time, generally an entire school year; a test score projected from a student’s earlier achievement is compared to the student’s actual score. The difference between the projected and actual scores is the “value added.” Value-added is based on individual student academic achievement, rather than an absolute standard where every student is compared to every other student in the system.

The value-added method is of particular interest to education reformers because it is able to pinpoint teacher effects on student learning more precisely than other methods. It isolates the teacher’s impact by controlling for prior student achievement and other background characteristics that can bias analysis of test scores.

In short, VAM potentially provides a way for the New York City educational system to analyze the connection between teaching and learning in a clear, effective manner. As the system generates data through VAM, professional development programming can be tailored to teachers’ particular strengths and challenges. Data on both teachers and students that can be used to:

- *Improve teacher professional development.* By utilizing measures related to individual student growth, VAM offers a stronger foundation for teacher evaluation than methods based on the proportion of students meeting a fixed standard of performance, and removes much of the ambiguity inherent in teacher self-evaluation. VAM “shows teachers which students are making the most – or least growth in which subject areas. In breaking down teacher effectiveness information by topic or concept, the data often shows that teachers are quite effective in some subject areas, but less so in others”.<sup>81</sup> Identifying which students are not meeting standards in which subject areas facilitates the individualization of professional development and its ability to address both school and teacher weaknesses. Future VAM analyses can also determine whether the prescribed professional development resulted in improvement.
- *Better measure school effectiveness.* VAM can help identify schools that raise student achievement and ineffective schools that do not. It can identify which students (and which schools) in the system are showing year-to-year improvement in terms of student achievement, and which are not.
- *Promote better instruction.* VAM can, “by measuring student achievement gains under individual teachers who may be using similar or different teaching methodologies, inform lawmakers, education officials, teachers and the public

about which instructional practices are best able to move students toward subject-matter proficiency”.<sup>82</sup>

The Commission recommends that teacher and student data drive the creation of professional development plans. Most teachers will not be proficient in all the areas they need to be when they begin teaching. Induction and professional development is the way that teachers will be taught what they need to know on a continuing basis. For induction and professional development to be meaningful, they must be based on data showing teachers’ and students’ strengths and challenges. Data on students, garnered through the value-added method and the Independent Institute, will provide information on students, and particularly what subjects and areas they have difficulties with. Data on teachers, generated through the value added system, will provide information on the strengths and weaknesses of individual teachers. This data will be used to create individualized professional development plans for every teacher in the school system, linked to the classroom and teachers’ learning needs.

### ***Using VAM for Teacher Evaluation***

Value-added data can also be used to improve the effectiveness of the teaching workforce by making the periodic assessments more rigorous and timely. The knowledge and skills assessment system recommended in this report is based on evaluation of teachers’ demonstrated knowledge and skills in a variety of areas. Value-added data can generate information about how teacher knowledge and skills (inputs) impact student achievement and learning (outputs), thus creating a stronger assessment of teacher abilities and performance.

In the last few years there has been a strong push in both the education and policy communities to use value-added methods for the direct evaluation of teachers:

VAM moves the discussion about teacher quality where it belongs – centered on increasing student learning as the primary goal of teaching,” and enhances the rigor of the teacher evaluation process by introducing a quantitative component. In addition, “teacher effectiveness data can help create a professional culture that is more oriented toward achievement and continuous improvement...Using teacher quality information to identify, recognize, encourage and reward effective teachers can...help transform teachers with the potential to be high-achieving; bring more people into the profession that thrive in that environment naturally; and move people out of the profession who can’t or won’t make the change.”<sup>83</sup>

While value-added assessment is an exciting method that can add a new dimension to teacher evaluations, there are problems with the method that, in certain circumstances, undermine the validity of its results.<sup>84</sup> For example, the data currently generated through VAM can only be used to make determinations about teachers at the

top and bottom of the teacher-quality scale; it cannot be used to make accurate determinations about “average” teacher performance.

Moreover, there are various unintended consequences that might occur if a VAM system is not properly and carefully implemented. Attributing student gains to particular teachers can be problematic. Statistical models cannot identify the strategies and practices teachers’ employ, nor project into the future the impact of particular teachers on student achievement. In addition, students learn skills in multiple contexts (for example, students’ gains in writing may actually be produced by the social studies teacher who assigns regular research papers and requires revisions rather than by an English teacher who assigns no writing). Without looking at practice, inferences about what teachers are doing cannot be made accurately from test scores.<sup>85</sup>

These differences among students can affect not only overall test scores but also the individual and aggregate gains that are possible on particular tests. In addition, the evaluation of teachers by average student test scores alone may provide disincentives for teachers to serve students with high levels of needs – and could reinforce the current paradigm in which inexperienced teachers are assigned to the neediest students.

These issues necessitate that VAM data not immediately serve as one of the primary ways to make high-stakes decisions about teachers. Additional measurements that go beyond what is captured through standardized tests should be utilized when assessing teacher effectiveness.

Therefore, the Commission recommends that an experiment be conducted to determine how VAM can be incorporated into the teacher assessment system, specifically into the knowledge and skills assessment. The inquiry should address how to create an assessment system that utilizes multiple measures of student progress, evaluates teacher practice and considers the student and school context.

### ***Time for Professional Development***

Innovation and positive change cannot be sustained at the school level if teachers do not have an opportunity to discuss what they have learned with other teachers. Teachers need structured and unstructured opportunities to reflect on what they have learned during off and on-site professional development activities. In schools, spare time is hard to come by. Shared planning time is difficult to find when free periods are used for faculty meetings, workshops or other information-dispersing sessions. Coaches, for example, frequently complain that scheduling interferes with their ability to provide teachers with effective feedback and to give teachers the opportunity to observe their colleagues in the classroom.<sup>86</sup>

“One of the biggest impacts schools can have on professional development is...to regularly schedule common time among teachers for planning, discussion and comparative observations about students.”<sup>87</sup> The Commission recommends that schools

budget an additional one hour a week for professional development and for teachers to work with each other on solving the educational problems of their students. The Independent Institute will evaluate the use of this time.

### ***Literacy and Math Coaching***

The primary goal of instructional coaching is to embed professional development in each school. Instructional coaches attempt to ensure that theory is translated into practice, and ideas developed in professional development activities are applied in the classroom. “Effective coaches and coaching structures build instructional and leadership capacity by applying what is known about adult learning and change theory...In cases where coaches are effective liaisons between school practice and district initiatives, emerging evidence shows that they can facilitate professional learning that supports system-wide initiatives more powerfully.”<sup>88</sup>

Urban districts have difficulties recruiting and training sufficient numbers of qualified instructional coaches. In this situation, it is once again the low-performing high-need schools that are assigned the least qualified staff. Furthermore, coaches in low-performing schools are very often inadequately prepared to deal with the enormously challenging task they face in convincing teachers to actively participate in professional development and to remain open to assessment and changing their teaching methods.

Even when coaches are adequately prepared, supported, and qualified, there are not enough of them in each school to tackle all the work they must do. Currently, every New York City public school is assigned one math and one literacy coach. The stated role of these coaches is to develop and support a culture of professional development in the schools; work with the principals to assess teachers’ needs and plan appropriate professional development activities; and assist teachers in using the instructional materials related to their schools’ math and literacy programs.<sup>89</sup>

With one math and one literacy coach per school, regardless of staff and school population, the system has opted to provide everyone with a little bit of coaching. This “thin” formula is problematic, however. Research has shown that “when coaches are spread thinly across a district’s schools, teachers have insufficient opportunities to learn from them and coaches find themselves frustrated by their inability to make a significant difference”.<sup>90</sup>

The Commission’s recommendations are designed to increase the supply and improve the quality of math and literacy coaches. To achieve these goals, the Commission recommends that Master Teachers be recruited and trained as instructional coaches. Master teachers by definition will already have demonstrated the high knowledge and skill standards required for coaching. Increasing the ratio of coaches to students will help increase the likelihood that coaches’ work will have a positive effect on teachers’ classroom practices.

### ***Environment for Quality Professional Development***

The Commission recognizes that the forms and structures for professional development that it recommends will not, on their own, guarantee consequential teacher learning.<sup>91</sup> The recommendations are designed to create an environment in which quality professional development can take place and to foster a stronger culture of professional development throughout the system. The professional development evaluation will help the system identify best available research and practice. Annual professional development plans for teachers will help to tailor programming to teachers' individual needs, while additional time for professional development will help ensure that it is planned collaboratively and by those who will participate in and facilitate that development. The instructional coaching formula will ensure that teachers develop further expertise in subject content and advanced teaching strategies. Together, these recommendations will promote and integrate continuous inquiry and improvement into the daily life of schools.

## REDUCING CLASS SIZES

Overcrowded classes are the norm in New York City, caused in part by a serious facilities shortage and lack of adequate school funding.\* During the 2001-2002 school year, only 38 percent of the City's Kindergarten students were in classes of 20 or less, while only 33 percent of first and second graders and only 28 percent of third graders were in classes of that size. At the beginning of the 2002-2003 school year, one quarter of New York City public schools students in grades K-3 (i.e. over 77,000 children) were in classes larger than 25.<sup>92</sup>

A UFT survey conducted at the start of the 2003-2004 school year found that more than 9,000 classes exceeded the contractual class-size limits, which allow 25 students in Kindergarten, 32 students in upper grades of elementary school, 33 in middle schools, and 34 in high school.<sup>93</sup> Even with federal, state and city funding to reduce class sizes in grades K-3 during the 2003-2004 school year, average class sizes in these grades increased in 15 districts, while only declining in 14, despite reduced enrollment.<sup>94</sup>

The upper grades are hardly immune from excessive class size. In fact, the City's cap of 34 students per high school academic class is among the highest in not only the State, but also the nation. At the beginning of the 2004-2005 school year the union reported overcrowding in more than 11,000 classes, particularly in high schools in Queens and Brooklyn.<sup>95</sup> The Independent Budget Office (IBO) reported that Staten Island had average middle school class sizes of 30.8, while middle schools in parts of Queens averaged 29.4 students per class.<sup>96</sup>

***"The high school class size in my older child's school averages 35 per class. There are many occasions when, due to the sheer size of the class, her questions and problems simply cannot be addressed."***

***----Kivi, Parent of two, Your Voice, Your Schools***

Beyond city limits, class sizes decrease considerably. The Court acknowledged this disparity when it determined that "New York City schools have excessive class sizes, and that class size affects learning."<sup>97</sup> As Table 7 demonstrates, citywide class size averages reported by the City Department of Education and the State Education Department are consistently higher in grades K-5 than averages throughout the State.

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\* The impact of facilities on class size, and recommendations for reform, will be discussed in detail in Part II of the Commission's report.

Table 7

| Comparison of Class Size Conditions NYC v NYS** |                                |                                 |
|-------------------------------------------------|--------------------------------|---------------------------------|
|                                                 | Citywide Average <sup>98</sup> | Statewide Average <sup>99</sup> |
| Kindergarten                                    | 20.4                           | 18.9                            |
| 1st                                             | 21.6                           | 19.2                            |
| 2nd                                             | 21.8                           | 19.9                            |
| 3rd                                             | 22.3                           | 20.7                            |
| 4th                                             | 25.4                           | 21.1                            |
| 5th                                             | 26.9                           | 22.2                            |

Even more striking is a side-by-side comparison of class size averages in New York City with those in nearby suburbs. Table 8 reveals that New York City's average class sizes at every level exceed those of neighboring Westchester and Nassau—two counties known as magnets for the City's fleeing teachers.

Table 8

| Class Size Averages: New York City vs. Neighboring Counties |             |        |               |
|-------------------------------------------------------------|-------------|--------|---------------|
|                                                             | Westchester | Nassau | New York City |
| Kindergarten                                                | 18.6        | 19.5   | 20.4          |
| 1 <sup>st</sup>                                             | 20.0        | 20.1   | 21.6          |
| 2 <sup>nd</sup>                                             | 20.3        | 20.8   | 21.8          |
| 3 <sup>rd</sup>                                             | 21.6        | 21.4   | 22.3          |
| 4 <sup>th</sup>                                             | 21.6        | 21.5   | 25.4          |
| 5 <sup>th</sup>                                             | 22.6        | 22.6   | 26.9          |

A recent investigation found that nearly a quarter of the teachers who reported they would be exiting the system to teach outside the City the following year cited excessive class size as one of their top reasons for departure.<sup>100</sup> The comparison between class size averages in some school districts in neighboring counties and those in New York City, as shown in Table 9, provides a clear demonstration of why they leave. If smaller class sizes are attracting teachers, areas such as Scarsdale and Bronxville will easily trump Brooklyn and the Bronx.

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\*\* Class size averages for grades 6 through 12 were not available from the City Department of Education of the State Education Department. High school class sizes vary by subject.



Table 9

| Class Size Averages: New York City vs. Neighboring School Districts |                            |                             |                       |                        |                  |
|---------------------------------------------------------------------|----------------------------|-----------------------------|-----------------------|------------------------|------------------|
|                                                                     | Scarsdale<br>(Westchester) | Bronxville<br>(Westchester) | Manhasset<br>(Nassau) | Great Neck<br>(Nassau) | New York<br>City |
| Kindergarten                                                        | 19.4                       | 17.6                        | 18.9                  | 16.4                   | 20.4             |
| 1 <sup>st</sup>                                                     | 19.1                       | 19.0                        | 20.3                  | 16.8                   | 21.6             |
| 2 <sup>nd</sup>                                                     | 19.8                       | 20.8                        | 19.8                  | 18.0                   | 21.8             |
| 3 <sup>rd</sup>                                                     | 19.5                       | 20.2                        | 19.5                  | 19.1                   | 22.3             |
| 4 <sup>th</sup>                                                     | 20.5                       | 17.5                        | 21.7                  | 18.7                   | 25.4             |
| 5 <sup>th</sup>                                                     | 21.1                       | 21.3                        | 22.0                  | 21.1                   | 26.9             |

### *The Research on Class Size*

Research indicates that small classes in the early grades, when students are learning to cope with and work in classrooms, generate “substantial advantages for students in American schools, and those extra gains are greater the longer students are exposed to those classes.”<sup>101</sup> K-3 students exposed on a long-term basis to small classes (i.e., 17 or fewer students) have substantially higher levels of achievement than K-3 students placed in standard classes. Evaluation of a Wisconsin class size reduction program found that students placed in class sizes of 15 were, by the end of grade 3, more than seven months ahead in comparison to their standard class size counterparts, with minority and inner-city school children receiving benefits that were twice as high as white and non-inner city counterparts.<sup>102</sup>

These gains continued in the upper grades, when students were returned to standard size classes. Tennessee students exposed to small classes for between one to four years showed cumulative advantages in reading, math and science in grades 4, 6, and 8, when they were returned to larger classes.<sup>103</sup>

Proponents of class size reductions point to research that argues smaller class sizes make it easier for students to learn and for teachers to teach. According to this research, teachers in smaller classes have more enthusiasm for teaching. They also have more opportunities to interact with students, develop in-depth knowledge of their educational strengths and weaknesses, and focus on individual and group instruction and assessment rather than classroom management and discipline, both of which detract from teaching and learning time.<sup>104</sup> Furthermore, teachers participating in class size reduction programs have reported higher levels of student participation and more positive relations among students. They have noted that students in smaller classes have better classroom behavior, and find it easier to ask questions and get individual assistance from the

teacher.<sup>105</sup> In sum, advocates argue that smaller classes help to contribute to a healthy, productive school climate that facilitates both greater subject matter learning and more positive attitudes about education among students.

### ***Low-performing schools and class size***

Class size reductions enhance teachers' abilities to address the learning requirements of at-risk student populations.<sup>106</sup> With regard to minority students, research shows that after Kindergarten, minority student achievement gains from small classes were at least twice as great as the gains of non-minority students in reading and close to that level in mathematics.<sup>107</sup> Benefits experienced in the upper grades by students who are traditionally educationally disadvantaged include better grades on average, fewer dropouts, and less grade retention.<sup>108</sup> Poor and minority high school students exposed to smaller classes in the early grades were also more likely to take foreign languages and advanced classes and graduate from high school.<sup>109</sup> Proponents have also argued that small class sizes can reduce the number of students placed in special education programs and the need for disciplinary action.<sup>110</sup>

This research demonstrates that the additional opportunities for individual instruction that small class sizes provide are particularly important in low-performing schools with large numbers of high-need students. High-need students at risk of grade retention are often, from as early as Kindergarten, in overcrowded schools with large class sizes. Many of them have special learning needs that are harder for teachers to meet in larger classes; it is difficult for teachers in large classes to properly assess the needs of these students let alone provide them with the individualized, focused, and timely interventions they require. In short, these students fall behind further when they are in schools with large class sizes. A recent study comparing high and low-need students in achievement found that by 10th grade, high-need students are only reading at a 5th grade level.<sup>111</sup> Small class sizes in the early grades are needed to get students such as these on track sooner.

### ***The Effect of Class Size on Teaching***

A fundamental condition for the success of class size reduction, as with any other educational intervention, is good teaching. When class sizes are reduced, additional classrooms must be located or built and sufficient numbers of high quality teachers for the additional classes created must be found and brought on board.

If this is not done, it is far less likely that class size reduction will result in significant achievement gains.<sup>112</sup> California's statewide, mandated, multi-billion dollar class size reductions provide a cautionary example. The reductions required a 38 percent increase in classroom teachers. As a result of this staffing issue, half the teachers who

were subsequently hired had little classroom experience; in addition, over the course of several years, teacher qualifications, particularly at the elementary school level, decreased.<sup>113</sup>

Class size reductions must come in tandem with reforms of the induction and professional development system in New York City. If schools need to hire new or unprepared teachers to enact class size reductions, they will need resources to support beginning teachers. Teachers will need to be trained to teach in a smaller class size environment and to work with students in smaller groups and one-on-one. Significant changes in teaching do not automatically result from smaller class sizes.<sup>114</sup> Not all teachers are prepared to take advantage of smaller class sizes to engage further with students and parents or to respond individually to students' learning needs.<sup>115</sup>

Implementing an effective class size reduction strategy, a daunting prospect for the most avid reformers, is even more challenging because research shows that all children do not benefit equally from class size reduction. Younger and poor and minority students derive particular benefits from smaller classes, while the benefits of class size reduction are less striking in the case of older and higher-income students.

Class size is inextricably linked with other necessary reforms, notably the need for better facilities. Comprehensive planning that encompasses instructional capacity can make the difference between successful and unsuccessful class size reduction. In Austin, Texas, for example, both achievement and attendance remained low in schools where only class sizes were reduced, whereas schools that provided individualized instruction and improved school supports as well as class size reductions showed striking improvement by comparison.<sup>116</sup>

## RECOMMENDATION 9

Cap\* class size in grades K-12 to allow for individualized instruction, additional time on task and superior classroom conditions for both teaching and learning.

### SPECIFICS

- The following caps on class size would produce the following averages for Target and Non-Target Schools:

| Level        |        | Target Average | Target Cap |
|--------------|--------|----------------|------------|
| Early Grades | (K-3)  | 14.1           | 15         |
| Elementary   | (4-5)  | 20.0           | 22         |
| Middle       | (6-8)  | 23.7           | 25         |
| HS           | (9-12) | 24.3           | 25         |

| Level        |        | Non-Target Average | Non Target Cap |
|--------------|--------|--------------------|----------------|
| Early Grades | (K-3)  | 16.6               | 18             |
| Elementary   | (4-5)  | 24                 | 27             |
| Middle       | (6-8)  | 25.9               | 28             |
| HS           | (9-12) | 26.5               | 28             |

The Commission's costing out determined that class size reductions in these amounts would cost \$784 million.

- Develop a system-wide experiment to research the connection between small class sizes in the upper grades and student achievement and teacher retention, to determine the optimal class size at different grades.

The goal of our class size recommendations is to facilitate increased achievement both system-wide and in low-performing schools by providing superior conditions for teaching and learning. Reducing class sizes will begin to close the gap with the rest of New York State. Reduced class sizes in the target schools will also serve as an incentive for high quality teachers to work in these schools. By placing caps on class size, rather than prescribing averages, we hope to systemically protect against overcrowding in every classroom, which has plagued the City's schools for years. (A detailed explanation of the costing out and class size reduction methodology is found in Appendix C of this report.)

Smaller classes facilitate higher quality teaching and learning through greater individualization of instruction and by increasing the ability of teachers to address students' unique needs. The Commission recommends such low caps on grades K-3 because the research shows a strong link between small classes in the earliest grades and

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\* Calling for a cap produces smaller class sizes than does calling for a class size average in the same amount. For example, when you call for a cap of 20 students in a school of 50, you get two classes of 20 and one of 10. The school can then equalize the classrooms by creating two classes of 17 and one of 16.

increased student achievement. Reductions in later grades are less concentrated because they serve primarily as a teacher quality incentive and an effort to improve learning conditions in schools. To determine the optimal class size at different grades, the Commission recommends the development of a system-wide experiment to research the connection between small class sizes in the upper grades and student achievement and teacher retention.

Smaller classes are not an educational panacea, and the implementation of any classroom reduction strategy must be planned carefully. To be effective, programs for reducing class size should be carefully designed, with attention paid to the other needs and strengths of the existing school system.<sup>117</sup>

The most recent data on class size reduction demonstrate that while moderate class sizes are a strong component of providing an adequate education to schoolchildren, there are good and bad ways to carry out such reforms. Class size reduction, like all other educational reforms, has to be designed and implemented with consideration for (1) how it interacts with other aspects of a comprehensive school reform plan, such as improving teacher quality and facilities; (2) how it interacts with other parts of the school system, such as curriculum and instructional practice; and (3) positive and unintended negative consequences of the reform, such as pressures on teacher supply and classroom space.

In light of the research on the relationship between class size and student achievement and learning, the system should institute significant reductions in the target schools and more moderate reductions in the rest of the schools. It is essential that class size reductions be implemented first in the schools whose students will most benefit from them.

Class size reductions should begin in the target schools, starting in the lower grades and extending through grade 12 over the course of several years. When class size reforms are phased in too quickly, it is ethnically diverse and poor schools that have the most difficulty in implementation. It is critical to begin class size reductions in the target schools and then expand them system-wide. If reductions are done immediately system-wide, the supply of high quality teachers available to work in the target schools will shrink, further damaging these schools.<sup>118</sup>

Given the scarcity of research on the benefits of class size reduction in the middle and upper grades, more investigation is needed before system-wide class size reductions in grades 6-12 are implemented. Small-scale research experiments should be conducted to determine optimal class sizes for these grades. Trends to look for will be whether instruction is strengthened; remediation, retention and special education referrals decrease; parent interaction and student achievement increase; and teacher quality is impacted.

## ENSURING MEANINGFUL ACCOUNTABILITY

With the influx of additional funding promised by CFE, the New York City school system must plan to use the new resources it receives responsibly and wisely. Skeptics argue that the public school system has wasted scarce resources in the past and will do so again.

Their doubts have good cause. Every chancellor, every reform advocate comes in with a new agenda, and the list of reforms – curricular, organizational, and instructional – is endless. Because each new reform initiative has generally occurred in a vacuum, without a sense of what’s been tried and what has and has not been proven to work, and because there has never been the capacity within the DOE to rigorously evaluate the effectiveness of all new initiatives, the system has not been able to develop the knowledge base necessary for continuous and cumulative improvement.

This time, however, school officials will be taking action in an unprecedented spotlight. For the first time, officials will need to show the Court – and the public – not only short term gains but actual strategies and whether they produce real opportunities for learning. They will have to show that decisions are based on evidence, using valid, objective and transparent assessment tools, and not the influence of various constituencies invested in one or more particular programs.

In the absence of reliable data, serious accountability is impossible. Incredibly, there is no current tracking of reform initiatives, no effort to discover what works and what does not work. An independent research and assessment body is needed to provide valid, reliable and verifiable data to assess financial and educational initiatives and engender needed public confidence.

### *Experience in Other States and School Districts*

The history of school finance offers a cautionary tale. From the first cases in the 1970s to more recent decisions, plaintiffs in many school finance cases have been far more successful at gaining remedies that increase funding for schools than they have been at ensuring those remedies are utilized to benefit children’s education.

The result is that isolated examples of high quality instruction have been more common than sustained improvement in conditions over time. Too often, a rapid, substantial infusion of new funds has failed to make the fundamental changes in the conditions of students’ educational opportunities sought by reformers. Across the country, too many school districts have squandered hard-won opportunities for systemic reform and today find themselves hard pressed to make needed changes.

One characteristic of many of these cases has been a failure to closely track how resources are being spent, whether they are being used efficiently, and whether more

resources are necessary. There has also been a failure to determine whether students are being provided with real opportunities for learning and whether these opportunities are producing positive achievement outcomes, to evaluate the causes of success or failure and to build upon, revise or eliminate programs or practices in response to this information. Finally, there has been a failure to analyze and improve practice on the ground.

With that history, enhanced resources have not always yielded increases in opportunities to learn or in student achievement. Although it is inevitable that certain practices or initiatives, while promising in theory, may fail to produce results once on the ground, it should not be inevitable that these initiatives continue to receive funding and support.

### ***Spotlight on New York City***

It's no exaggeration to say that the whole nation will be watching what New York does here and what it makes or fails to make of this opportunity. What happens here will reverberate in Chicago, Los Angeles, Miami, Houston, and every other major metropolitan center across the United States.

Can additional money make a difference to the education of public school students, particularly those in urban settings? Or are the problems too huge, too intractable, beyond any solutions? The answer is by no means settled in the public view. What is done here, and what is learned from it, will likely shape the future course of American public education well into the 21<sup>st</sup> century. When the opportunities for dramatic improvements are extraordinarily high, the consequences of failure are also extraordinarily far-reaching.

### ***Dynamics of School Improvement***

The work of improvement at the classroom and school level operates in a different framework from system-wide action that seeks to demonstrate results quickly. The work of improvement involves a high level of focus on the instructional core sustained over time.

Education reform is not a static process but a dynamic one. The work of improvement requires provisional decisions, based on uncertain knowledge, subject to revision in the face of countermending evidence. The work does not end once funds are allocated; officials must be able to identify policy and practices successes for replication and failures that necessitate pulling back or changing course. The course of improvement involves periods of growth punctuated by periods of consolidation and capacity building.

Educational reform requires the development of tremendous amounts of knowledge, skill and organizational capacity. This work is complex, plodding, subject to revision in the face of countervailing evidence, and not easily captured in sound bites.

In order for real change to occur, rigorous, scientific research plans should be designed and data collection initiated, so that both education officials and the general public can have good answers to these important summative questions about the impact on educational opportunities for students.

### ***Evidence-Based Decision Making***

The City's public school system needs a commitment to evidence-based decision making so that evolving policy development will be based on systematic assessments of what is working and not working in the City's schools. Without carefully crafted analytic designs, decision makers will be unable to sort out the separate effects of the multiple program activities occurring simultaneously within the New York City school system. Political realities make it likely that education officials will rely on highly visible aggregate outcomes and fall back on the prevailing practice of interpreting small changes in annual test score reports as evidence of program effectiveness, even though such data can mask harmful effects occurring on identifiable sub-sets of children.

New York City's school system has already made several major attempts at reform. Within the past three years, the DOE has hired thousands of instructional coaches to advance teaching and learning. This program raises hard questions, questions that need answers. What is the nature of the work that coaches are actually doing? How are the system supporting and/or constraining their efforts? Is there any evidence that coaches are actually improving teaching practice in schools?

Similarly, the system has embraced the launching of many new small schools as another of its core reform strategies. What common problems are small school design teams confronting? Are these new schools attracting and maintaining quality staff? Are teachers working well together and engaging students in the hard work of learning? How do parents and students view their experiences in these new school environments?

Most importantly, for each initiative, is there any evidence that students are actually learning more?

Even solid "evidence-based practices," such as pre-kindergarten, extended day, and reduced class size, can fail to yield improvements when rapid implementation is pursued at scale without a careful analysis of the conditions necessary for success. If real change is not to be sacrificed for cosmetic change, reform efforts must be guided by systematic evidence about the actual progress occurring in the City's schools.

Each initiative is based on some implied theory of action—how this new program or policy is supposed to contribute to one of the core goals identified above. This theory



needs to be fully explicated. What are the critical assumptions embedded here? How might we expect this initiative to develop over time, if it is really working? What are appropriate leading indicators for judging the initial efforts here? How will we know if this policy, as it is being implemented, is vital and maintains promise or is “dead on arrival?”

Looking forward, the same kinds of critical questions should be asked about each new reform. This way we can ensure that the primary commitment is to real achievement for the City’s schoolchildren, not to the new programs that have been put in place.

### ***Need for an Independent Research Body***

Comprehensive educational reform is most effective when it is tied to a series of checks and balances designed to ensure that all aspects of the system – its organizational structure, policies, and practices – truly benefit children. The public must be assured that reform efforts are made in an objective way, not tied to any particular administration or political ideology. Officials must also provide all of the systems’ stakeholders, parents, teachers, administrators, community based organizations and advocacy groups, with the clear and reliable data and information they require to understand what the system is doing to improve instruction and increase children’s learning, and whether these efforts are working and why.

The Commission proposes a new public institution to facilitate the meaningful evaluation of school system reform: A fully autonomous or independent body with the responsibility for evaluating evidence on the course of improvement, identifying opportunities for mid-course changes in strategy, focusing attention on emerging problems, and providing education officials with feedback on how they might sustain and increase the rate of improvement.

This institution would have a single, sharply focused mission -- **to undertake research and analysis that informs broadly on the progress of the school system’s efforts to use its new resources to improve public education.**

### ***The Court on Accountability***

In suggesting an independent research body, we are mindful of other recommendations concerning accountability structures for CFE. Notably, the Court, adopting a report of court-appointed referees, issued an order which rejected the creation of a separate Office of Educational Accountability under the State Education Department in favor of enhancement of what it termed existing accountability structures. The reasoning of the referees was that existing State Education Department systems for measuring student achievement, identifying poor performing schools and imposing

sanctions provided adequate State accountability for schools which are failing to give students the opportunity for a sound basic education.

The “enhancements” recommended to the Court included the development by the DOE of a comprehensive sound basic education plan, setting forth in a detailed, transparent manner the precise management reforms and instructional initiatives the DOE will undertake, and a comprehensive sound basic education report tracking dollars and measuring performance and benchmarks.

The Commission, like the Court, believes that accountability structures that move in after the fact to fix failing schools are already present and are not needed. The Independent Institute recommended by the Commission is not intended to enforce sanctions for failing schools or impose remedies on the DOE based on its findings. It is designed to be an analysis and research body, to help the DOE in the performance of its reform efforts by providing it with independent and trustworthy information about which policies and practices are and are not producing desired results. The Independent Institute -having no responsibility for education, or investment in the results of any particular strategy or action – will provide independent and trustworthy measurement of reforms and initiatives.

## **RECOMMENDATION 10**

Create an Independent Institute for Research and Accountability (Independent Institute), whose mission is to provide the public, the DOE, the schools, the Mayor, the State and the Court with evaluation of educational reform initiatives by the school system, parent/student/teacher satisfaction, and a tracking of the dollars from the CFE case. An independent body to conduct educational research and assessment is needed to report on system reforms, provide data to the public, and instill public confidence.

### **SPECIFICS**

- Create a Blue Ribbon Board of Trustees for the Independent Institute, to consist of seven individuals from among the City’s civic community whose terms will be staggered. Two will be appointed by the Mayor, two will be appointed by the City Council, two will be appointed by the City Comptroller, one by the Public Advocate. Appointing authorities from local elected City offices with a stake in the results will help to ensure both necessary authority and independence. Term of office will exceed those of appointing authorities and be staggered.
- Create an Advisory Group comprised of parents and other stakeholders, who advise on the research agenda and reform initiative implementation. The Advisory Group will serve as a bridge between the work of the Independent Institute and the larger school community.
- Research Agenda - On an annual basis, in consultation with the DOE, the Independent Institute will develop a research agenda identifying the particular issues, initiatives and indicators of student performance on which research will focus, including the reform initiatives undertaken by the DOE, individual student progress, and parent/student satisfaction.

- Public Reports - On an annual basis, the Independent Institute will release public reports analyzing how the CFE monies are spent, the DOE's reform initiatives (in terms of both cost effectiveness and impact on student performance) and what the data means in relation to student learning.
- Court Studies - Every four years, the Independent Institute will reevaluate the operational costs of providing New York City students with a sound basic education. Every five years, the Independent Institute will reevaluate the amount of annual funding, if any, required for additional facilities.
- To ensure that the Independent Institute's data and analysis make a meaningful difference in improving student outcomes, the Independent Institute works in consultation with the DOE to help schools and the school system to interpret information provided for improvement purposes – to determine the underlying causes of poor performance, to develop strategies that reverse identified failure, and to develop strategies for replicating initiatives and practices that are working throughout the system.
- Information Requests - The Independent Institute will also respond to requests for information and analysis by government officials and advocacy organizations.

Parents, teachers, and advocates who testified at our public hearings expressed their desire for a process that will, without adding another layer of bureaucracy, openly track, for the public and the school system, how education dollars are spent and the impact they have on children's ability to learn.

The Independent Institute, modeled on components of the Consortium on Chicago School Research, the Government Accountability Office, the Independent Budget Office and the Financial Control Board, does just that. It will stand separate and apart from government and complement the work of the DOE, conducting high quality technical evaluations and helping the public and local leadership use the findings to inform both policy and practice.

First, it will track whether resources are being spent effectively in advancing student learning. It will determine which system initiatives are succeeding and which are falling short. Second, it will report on student performance. Third, it will be in a position to facilitate DOE compliance with the Court's order. It will conduct periodic studies to determine whether the operational and facility costs of providing the opportunity for a sound basic education for New York City changes, and more money is required. The Independent Institute will work in consultation with the DOE to analyze and improve the practice of individuals working at all levels of the system to implement reform initiatives.

The Independent Institute's findings will also provide guidance to the system as to how to productively invest resources and allow the system to evolve effective policy and practice decisions based on what works.

The Independent Institute will support the data and assessment work currently going on in the DOE. The DOE currently creates school report cards with aggregate

student performance information and demographic information on an annual basis. It also tracks and analyzes attendance, long-term absences, students at risk of being held back, dropout rates, and performance on city and state tests. The Independent Institute will be in a position to assist the Department of Education to take this analysis and assessment to a new level – to engage in a careful, detailed analysis of the effectiveness of the system’s major initiatives and their relationship to the indicators currently being tracked. It is not sufficient to just analyze test scores and graduation rates. The system must understand why test scores are going up or down. The Independent Institute has the capacity if called upon to help the Department of Education to develop a systematic understanding of how growth in knowledge and skill is occurring at the student, classroom, and system level; it also has the capacity if called upon to evaluate the quality of instructional practice and the learning of children across classrooms and schools with a wide range of starting points. Finally, the Independent Institute can serve as a resource to the Department of Education in developing rules of evidence and norms of discourse about how to distinguish successful from unsuccessful practices. This information will inform the design of professional development programming.

In the last few years the system has launched several new reform initiatives. The Independent Institute, once in place, can help the system to ask and answer hard questions about their effectiveness. This approach will force system leaders to remain primarily committed not to the programs put into place, but to the outcomes they are producing for New York City students.

Only initiatives that have been shown to succeed in New York City should be allowed to continue to grow. Every new appropriation should have a sunset provision built into it. Winning the argument for resources at the front end is only the first step. Ultimately, each initiative will need to prove itself in practice. The competition of ideas for how to improve schools, which swirls around inner policy circles, will get pushed out into the field and tested to see if program proponents can actually make their programs work in real schools and communities.

The Independent Institute will operate under an information sharing agreement with the DOE to allow it to conduct periodic surveys of principals, teachers, students, parents and administrators; longitudinal and short-term case studies of schools’ programs and performance; analyses of administrative records; teacher assignments and student performance; longitudinal analyses of test scores; and interviews of school system leaders, teachers, principals and other education officials. The Independent Institute will undertake all analysis in an objective, apolitical manner. In conducting its research, the Independent Institute will conform to the highest standards of discipline inquiry.

The Commission reviewed various possibilities for appointing authorities for Board Members, and decided it should be modeled on the Independent Budget Office, with appointing authorities chosen from among elected local citywide government officials, all officials with a stake in the results. Thus, the recommendation calls for two trustees to be appointed by the Mayor, two appointed by the City Council, two appointed

by the City Comptroller, and one to be appointed by the Public Advocate.\* As appointing authorities, these parties should provide the checks and balances to ensure the independence of and instill public confidence in the Independent Institute's work. The term of its membership would be designed to exceed those of appointing authorities and would be staggered to create stability in focus over time. The Independent Institute Board members will be responsible for hiring a director for the Independent Institute and ensuring that: (1) a broad and comprehensive program of research and evaluation is initiated; (2) the best and brightest academic resources are assembled to design, advise and carry out this work; (3) the Independent Institute has the authority and resources necessary to pursue fully the agreed upon research agenda; (4) the highest standards of discipline inquiry are maintained throughout, and (5) a full public reporting of all results. Staff will be comprised of researchers and policy analysts.

The director of the Independent Institute will assemble an advisory group comprised of parent, community based organization, advocacy group and teacher representatives. The Advisory Group will serve as a bridge between the Independent Institute and the larger school community. It will help to inform the Independent Institute's research agenda and to identify unintended consequences of different reform initiatives.

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\* Some Commission members strongly believe that the appointment of a Board Member with experience as a parent of a child in the New York City school system would enhance the decision-making perspective of the Board. It would be useful if the appointing authorities would take this into consideration.

## **CONCLUSION**

### **THE WORK SHOULD BEGIN NOW**

The CFE decision has created enormous opportunity for a school system that has long been denied the resources to adequately prepare its children. While there are challenges inherent in using the money well, if the City adopts strategies grounded in research, develops the human resource capacity necessary to implement them effectively and evaluates and revises them as necessary to ensure that they are achieving desired goals, citizens can be confident that their school system is doing all that it can to provide their children with a high quality education.

In this Part I of our report, the Commission has created strategies to increase the quality of teaching across the City, through incentives designed to recruit and retain better teachers, and assessments designed to ensure their quality.

We have also recommended, as a critical first step, that those schools where high-need low-performing students are concentrated receive targeted strategies that will attract and retain better teachers, including smaller class sizes with caps at the lower grades, to allow those teachers to teach in more conducive learning environments.

Finally, we have recommended the creation of an independent public entity, with no operational responsibilities, to function in an open and transparent research and evaluation role, providing meaningful data and opportunity for constructive comment. The independent body will provide the DOE, the Mayor, Court, the educational community, and the public with information on how additional resources are being spent and what is and is not working. We believe that this independent structure will provide needed checks and balances to ensure effective educational reform.

We know what is necessary for our children to learn at the levels they need to be effective citizens and productive members of society: quality teachers, appropriate class sizes to support learning, sufficient time to learn, curriculum and instruction geared to student needs, quality school leaders, adequate facilities and infrastructure, early education and identification of needs, and assessment and accountability. Our recommendations in this Part I of our report have focused on teachers, class size reduction, and assessment and accountability as necessary first steps for reform. The Commission recognizes that these other topics, not addressed in this part, are just as critical, and they will be incorporated into our final report. Our recommendations on the important issues of Leadership, Instruction, Facilities, Pre-Kindergarten, Technology, Student Support, and Parent and Community Connections will be included in Part II of this report, to be issued early this summer.

Although the CFE funds are yet to be allocated to the City, it is the Commission's view that work on these recommendations should begin now, in anticipation of the arrival of the CFE funds. Initial work on identifying schools for targeted efforts and development of an Independent Institute can begin immediately. Although several of our recommendations must be phased in, necessary planning and negotiations for teacher

incentives, assessment strategies, and class size reductions can start today. The work of the Commission has taught us the importance of careful comprehensive reform, addressed to one goal: the improved educational opportunities for the city's 1.1 million students. We believe that the recommendations contained in this report will help achieve that goal.

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 President  
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 Barbara Barbaria  
 Barbara Boies  
 Barbara Frasier  
 Barbara Guster  
 Barbara Lebowitz  
 Bashir Mchawi, Black New Yorkers for  
 Educational Excellence  
 Beatrice Bridglall, The Institute for Urban and  
 Minority Education  
 Belinda Zylbeman-Causevic  
 Bernard Hannish  
 Bertha Lewis, ACORN  
 Beth Bernett, P.S. 116  
 Betsy Combier, E-Accountability Foundation  
 Beth Bernett  
 Bette Lawler  
 Betty Feibusch  
 Betty White  
 Beverly Cambell  
 Bill Rosenthal  
 Bob Lubetsky  
 Bonda Lee-Cunningham  
 Boukan Collins

Brenda Batista, Make the Road By Walking  
 Candace Gonzalez, New York Center for  
 Interpersonal Development  
 Cara Jacofsky, P.S. 107  
 Carmen Modenaro Santos  
 Carol Blatt  
 Carole Filangieri  
 Carole Papadatos  
 Carolyn Prager, Advocates for Public  
 Representation  
 Carolyn Ubanks  
 Carrie Karabelas  
 Cathy Cooper  
 Cathy Crawford  
 Ceclia Brewer  
 Charles Achillies  
 Charles Brecher, Citizens Budget Committee  
 Charlotte Arboleda  
 Cheree Sattah, P.S. 86  
 Chris Bauer, Office of Assemblyman John Lavelle  
 Chris Owens, Former President Community School  
 Board 13 Brooklyn  
 Christina Fernandez, Hunter College H.S./P.S. 87  
 Manhattan  
 Christina Schafer Zizzo, P.S. 183  
 Christine Elibox, P.S. 160  
 Christine Lester  
 Christopher Minarich  
 Christopher Tienken, Dr., Monroe Township  
 School District  
 Clare Reilly  
 Claire Barnett, Healthy Schools Network  
 Claudia M. Toback, National Middle Level Science  
 Teachers' Association  
 Cliff Hong  
 Clive Belfield, Dr., National Center for the Study of  
 Privatization in Education  
 Cynthia Travis  
 Darylle Brent  
 David A. Campbell-Ben David  
 David Bloomfield, Citywide Council on High  
 Schools  
 David Krump  
 David S. Seeley, Dr., CUNY Graduate Center,  
 College of Staten Island  
 Dean Loren, Martin Luther King H.S.  
 Deborah Jacobs, Performing Arts & Tech H.S.  
 Deborah Schwartz  
 Debra Karlstein  
 Delrita Abercrombie, Ph.D  
 DeMitrio Pakalski, Community Education Council  
 Dennis Ford, P.S. 22  
 Derrick Booker  
 Devon Walton

Diago Gomes  
 Diane Lake  
 Dina Scalone  
 Dorothy P. Lane  
 Edith Marchewka  
 Edmund W. Gordon, Dr., The Institute for Urban  
 and Minority Education  
 Eduardo Nolasco, P.S. 173  
 Edward Josey, NAACP  
 Eileen Darcy  
 Eleanor Stier  
 Elena Mora  
 Elizabeth Carson  
 Elizabeth Ludwig  
 Elizabeth Ritter, M.S. 255  
 Elizabeth Schnee, Executive Board CPAC  
 Ellen Giordano  
 Ellen Levine  
 Ellen Raider, Co-Committee on the Independent  
 Commission on Public Education  
 Ellen Turner  
 Eliz Jiminez  
 Eliza Nichols  
 Emanuel Cameron  
 Emely Molina  
 Emil Pietromonaco, Staten Island UFT  
 Erica Rooney  
 Erlin Ibreck  
 Eugene Falik, LaGuardia High School  
 Eugenia Elsworth, P.S. 86  
 Eugenia Simmons Taylor  
 Eva Papillon, Martin Luther King Commission  
 Felipe Hall  
 Fran Regan  
 Fran York, Good Shepherd Services  
 Francis Brian  
 Frank Lang  
 Frank Volpicella, UFT  
 Gabrielle Gruder-Poni  
 Gabrielle Shubert  
 Gabrielle Tessler  
 Gail George, M.S. 340  
 Gail Rodgers Zecker  
 Gariela Mack  
 Gayra Ponesa  
 Gemma Picataggi  
 Georgette Pezalante, Presidents' Council, District  
 21 Gerry Sherman  
 Gene Borsch, Local Russian Immigrant  
 Organization  
 Gilly Nadel  
 Ginene Hoffman  
 Glen Earthman  
 Grace Parisi

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 Greer Hansen-Velazquez, P.S. 164  
 Greg Breinberg, P.S. 22  
 Greg Goldstein, P.S. 87 Manhattan  
 Gregg Lundahl, Washington Irving High School  
 Hamilton Lankford, SUNY, Albany  
 Harold Wenglinsky, Dr., Hunter College Center for  
 Law and Social Justice  
 Harvey Lichtman  
 Hazel Dukes, New York State Conference of  
 NAACP  
 Helen Settles  
 Helena Stevens  
 Holly Anderson  
 Ida Massena  
 Ira Zalcman  
 Ira Zornberg  
 Irene Varron, Brooklyn Studio Secondary School  
 Isabelle Montel  
 Jack Hernandez  
 Jackie Bennett, Petrides School  
 Jacob Morris  
 Jacob Thomas  
 James Bradley  
 James Calantjis  
 James Eterno, Jamaica High School  
 Jan Atwell  
 Jane Scheffield  
 Jasia Dykes  
 Jack Minogue  
 Jackie Ervolina  
 Jacqueline Tripodi  
 Janeen Richards  
 Janice Fulgieri  
 Jason Fernandez  
 Jay P. Greene Ph.D, Manhattan Institute for Policy  
 Research  
 Jeanette Martinez  
 Jeanne Gasanova, I.S. 72  
 Jeany Persaud, CPAC  
 Jeff Zaler, UFT, Region 4, District 30  
 Jemma Picataggi, I.S. 24  
 Jennifer Freeman, P.S. 166 Manhattan  
 Jennifer Garcia  
 Jennifer Gillet  
 Jessica Nunez  
 Jessica Siegel, Heritage School  
 Jill Levy, Council of School Supervisors &  
 Administrators  
 Jimmy Dumar, P.S. 112  
 Jinny St. Goar  
 Joan Deedorff, P.S. 63  
 Joan Petrere  
 Joan Serrono-Lauford

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 Joe Sicilian, Curtis High School  
 Joe Sweet  
 Jonas Bright Jr.  
 Jonathan Keller  
 Jose Davila, NYIC  
 Jose Pina  
 Joselyne Fernandez  
 Josh Karan  
 Joshua Alvarado, J.H./I.S 291  
 Joy Patron, Community Board No. 10  
 Joy Whelan  
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 Judith Broderick, P.S. 255  
 Judy Jones  
 Julie Marks  
 Juliet Luther  
 Kara Raynaud  
 Karen Koenig  
 Karen Romeo  
 Karina Costantino, P.S 22/CSA  
 Karina Jebril  
 Kate Bushman  
 Kathleen Gomez  
 Kathryn Carroll  
 Kathy McCullagh  
 Kegsy Castillo, P.S. 173  
 Ken Daniels  
 Kerici Marcello  
 Kiki Panos Sperazza  
 Kristen Poppele  
 Lakia Garner  
 Larry Ipittis  
 Larry Wood, Goddard-Riverside Houses  
 Laura Miller  
 Laura Nathanson  
 Laura Tietjen  
 Leanna Stiefel, NYU-Robert F. Wagner School  
 of Public Service  
 Leonie Haimson, New Yorkers for Smaller  
 Classes & Class Size Matters  
 Leslie Dublin  
 Lillian Rodriguez Lopez, New Yorkers for  
 Smaller Classes  
 Linda Cipollone, P.S. 55 Staten Island  
 Linda Darling Hammond, Stanford University  
 Lisa North, P.S. 3 Brooklyn  
 Lisa Panarello  
 Liz Morano  
 Liz Papadopoulos  
 Loren Svetvilas  
 Loretta Redmond  
 Loretta Tassotti  
 Lori-Ann Barrett, P.S. 41 Staten Island  
 Lori Bores  
 Lori O'Neill, Sheepshead Bay H.S.  
 Lori Stahl-Van Brackle  
 Lorraine Levey

Lorrel Lyn-Cook  
 Louise Edwards  
 Louise Warren, UFT Chapter Leader P.S. 94  
 Lucy Friedman, The After School Corporation  
 Lydia Tang  
 Lynn Foss  
 Lynn Fredericks, Family Cook Productions  
 Madeline Cohen  
 Madeline Rivera  
 Manuel A. Huerta  
 Manny Pavone  
 Marcelle Harte, Hight School for Public Service  
 and P.S. 276 Brooklyn  
 Marcia Golden  
 Marcia Lerner  
 Marianna Mott Newith  
 Marge Hedberg  
 Marge Kalb  
 Maggie Brennan  
 Maggie Fisherman  
 Maria Cologna  
 Maria Hodermarska  
 Maria Justice, Edward R. Morrow H.S.  
 Maria Luiza Ribeiro  
 Maria Marino, YMCA After School Program  
 Maria Maskemo  
 Maria Ouranitsas  
 Maria Scolaro  
 Marilyn M. Levin  
 Marilyn Valdes  
 Marlene Rosen  
 Mary Bauers  
 Mary J. Ward  
 Mary Kane  
 Mary McGrath  
 Mark Fertig  
 Marsha Robins, P.S. 128  
 Martin Olivieri  
 Martin Plothion, UFT  
 Martinia E. Surrency  
 Martine Guerrier, Office of Brooklyn Borough  
 President Marty Markowitz  
 Marvin Reiskind  
 Mattie Romano  
 Maximo Calderon, A. Philip Randolph H.S.  
 Mindi Shelow  
 Mindy Schiffman  
 Mary Powel-Thomas  
 Matt Goldberg  
 Megan Rudnick  
 Melissa Bell  
 Meredith Wiley, Fight Crime: Invest in Kids-New  
 York  
 Michael Hiller  
 Michael Cannon  
 Michael Fordunski  
 Michael Friedman, Off Site Educational Services

Michael Rebell, Campaign for Fiscal Equity  
 Michael Weinstein, Former Campus Manager  
 Walton Educational Campus  
 Michele Richard  
 Michele Severin  
 Michelle Bodden, UFT  
 Michele Burger  
 Michelle Gabriel  
 Michelle Nelson  
 Michelle Weston-Feguiere  
 Michelle Yanche, Neighborhood Families Services  
 Coalition  
 Michelle Yellon  
 Miguel A. Malo, P.S. 84/ JHS 50 Brooklyn  
 Miguel L. Salazar, Resources for Children with  
 Special Needs, Inc  
 Milagros Vincente  
 Mimosa Nelson  
 Moncrieff Cochran, Cornell University  
 Monte Joffee, The Renaissance Charter School  
 Nancy Carbone  
 Nancy Kolben, Child Care, Inc  
 Nancy Pereira  
 Nancy Wackstein, United Neighborhood Houses  
 Natalia Springer  
 Nelma DeChamps  
 Nora Baruso  
 Noreen Connell, Education Priorities Panel  
 Norman Scott  
 Pat Lockart, P.S. 57  
 Pat Miller, Coalition to Preserve D75  
 Patricia Connelly  
 Patricia Giordano, P.S. 13  
 Patricia Lundgren, P.S. 32/SW H.S.  
 Patricia Williams  
 Patricia Zedalis, Former Chief Executive, Division  
 of School Facilities  
 Patrina Huff  
 Patti Cohen  
 Patty May  
 Pauline Frank  
 Pennee Bender  
 Peter Cipollone, P.S. 55 Staten Island  
 Peter Lamphere, Columbus High School  
 Peter McNally, Council of School Supervisors &  
 Administrators  
 Phallis Vaughter  
 Phil Maravolo, Office of Assemblyman Michael  
 Cusick  
 Philip Coltoff, Children's Aid Society  
 Phillip Tamberino  
 Princess B. James, Prospect Heights H.S.  
 Priscilla Marco, Office of Senator Diane Savino  
 Rajiv Gowda, Community Education Council 31  
 Rasheed Defense  
 Raymond Domanico, Metro New York Industrial  
 Areas Foundation  
 Raymond E. Carroll

Regina M. Eaton, Alliance for Quality Education  
 Reynold Batson, P.S. 345 Brooklyn  
 Rhonda Kotner, Queens High School Teaching  
 Richard Ortiz  
 Ricardo Gotla, Coalition for After School  
 Funding  
 Richard Barr, Political Action  
 Richard Farkas, UFT  
 Richard Olsen  
 Rita Walton  
 Rob Caloras  
 Robert Caloras, Presidents Council District 26  
 Robert Crest  
 Robert Hughes, New Visions for Public School  
 Robert S. Johnson, P.S. 290  
 Robert Troeller, Operating Engineers Local 891  
 Rodney Deas, H.S. 113  
 Roe Wrubel, P.S. 89  
 Roger Dennis  
 Ronald Stewart, Community Education Council  
 Ronnie Modena  
 Roseann Hugh  
 Rose Gelrod, P.S. 63  
 Roslyn Johnson  
 Roslyn MacMullin  
 Ruby Santana, P.S. 90 Bronx  
 Ruddie Lewis, I.S. 285 Brooklyn  
 Ruth Chasek  
 Rytvo Soni  
 Sally Johnnes  
 Sally Mann  
 Sam Anderson, Medger Evers College Center for  
 Law and Social Justice  
 Samuel Greenberg  
 Sandi Lippe, I.S. 75  
 Sandi Lusk  
 Sandra Dunn-Yules, P.S. 7  
 Sandy Vallas, Greenwich Villiage M.S.  
 Sanja Zgonjanin  
 Sally Goyette  
 Sarah Figuereo  
 Sarah Kitzes  
 Sergio Lora  
 Sharon Lennett  
 Sharon Peersen  
 Shelia Al-Awdi  
 Sherri Donders, Staten Island Federation of PTAs  
 Sherry Reisner  
 Shirlee Taylor  
 Stephanie Eley-Yahjian, PACT  
 Stephanie Smith-Waterman  
 Stephen Feldheim  
 Soneni Smith, Alliance for Quality Education  
 Sophia Vailakis  
 Staci Feldman  
 Stacy Sorin, C.S. 50  
 Stanley Michels  
 Steve Adler

Steve Boese, Healthy Schools Network, Inc.  
 Steve Harris  
 Steve Morre  
 Steven Arce, P.S. 173  
 Stuart Nezin  
 Sue Henderson, Queens College  
 Sue Sloan  
 Susan Caplan  
 Susan Crawford, The Right to Read Project  
 Susan Messina  
 Susan Sharoma  
 Susan Volpe  
 Suzanne Reisman, Low-Income Investment Fund  
 Sylvia Aquino  
 Sylvia Tyler  
 Teresa DeMeo  
 Teresa Ying Hsu, Asian American  
 Communications  
 Terri Reynolds  
 Terri Trent  
 Theodore Hershberg, Center for Greater  
 Philadelphia, University of Pennsylvania  
 Thomas Cabaniss  
 Thomas Forbes, Cascades High School  
 Tiffany Walker  
 Tim Forker  
 Tim Frederick, Thurgood Marshall Academy  
 Todd Boressoff, Child Care Council at CUNY  
 Tricia Puleo  
 T. Thaddaeus Brown  
 Valerie Hill  
 Vanessa Melendez, P.S./M.S. 3 (Bronx)  
 Vera Streeter  
 Veronica Stein, P.S. 52  
 Victoria Bousquet  
 Violet Richardson, Truman High School  
 Vivian Farmery, P.S. 234  
 Voula Lagood  
 Walter Lynch, Citywide Council on High Schools  
 W. Frances Mack  
 Walker Goodman, P.S. 124  
 Walter Lynch, Citywide Council on High Schools  
 Wayned Casimir  
 William A. Robinson  
 William Boone, Educators for Children, Youth  
 and Families  
 Winifred Richman  
 W. Steven Barnett, The Institute for Urban and  
 Military Education  
 Yoette H. Moustaffa, I.S. 62/I.S 96/P.S. 6  
 Brooklyn  
 Yvonne Wakim-Dennis  
 Zaire Ansari, P.S. 219 Brooklyn  
 Zakiyah Ansari, P.S. 219 Brooklyn

## **APPENDIX A**

### **Models Used to Identify High-Need Low-Performing Students**

The differentiation modeling analysis was an iterative process of applying various combinations of values on the Need Index and the academic performance measures to data from the 2002 – 2003 ASRs for all New York City public schools and analyzing the groups of schools that were differentiated by each model. There were two sets of models for elementary and middle schools. One set consisted of all elementary and middle schools together. The second set of models were applied separately to early elementary schools (grades prek/k – 2), elementary schools (grades prek/k – 5/6), middle schools (grades 5/6 – 7/8), and elementary/middle schools (prek/k – 8). A single set of models was applied to all high schools together. The analysis began with models designed to identify the schools serving students with the highest Need Index and the lowest levels of performance and then proceeded to test models based on lower Need Index values and higher levels of student performance. After each model was applied, the characteristics of the differentiated schools were analyzed for the concentration of low-performing students they served and the concentration of the schools themselves in areas of the city.

Modeling differentiated three groups of low-performing elementary and middle schools, together comprising 351 (38.1%) of the 922 elementary and middle schools in the 2002 – 2003 ASR dataset, and one group of 53 (26.2%) of the high schools. Together, 404 (35.9%) of the 1,124 city public schools were identified for low-performance and/or high-need. High concentrations of low-performing students were found in the schools differentiated by these models. The three groups of elementary and middle schools together accounted for 63.3% of their respective low-performing students in the city and the group of high schools accounted for 46.6% of the city's low-performing high school students. Moreover, these schools were concentrated in areas of the Bronx, Brooklyn, and Manhattan that are characterized by low income, high special educational need, and inexperienced teachers.

The differentiation of three specific performance groups for the elementary and middle schools provide a structure for a phased implementation of CFE reforms. Model A schools might receive the first wave of reforms or a program of reform that is more intensive than Models B or C. If phase-in is desired for the high schools, another strategy would have to be employed for placing the differentiated high schools in subgroups.

In evaluating these results it is important to keep in mind the limitations imposed by the data. The analysis employed school-level data from the 2002 – 2003 ASRs, the best data available given the limited time to conduct the study. First, although comprehensive, the ASRs are limited to a specific set of data elements. In particular, the data elements that were used to measure student needs are proxies and not direct measures of the specific socioeconomic and educational needs of students. Second, using student-level data, as opposed to school-level data, would have provided the researcher with more flexibility and power to conduct the analyses. Last, these data are retrospective, reflecting the status of the school system a year and a half before the study

was conducted. Many of the students upon whom the data are based have moved on to other schools both within and outside of the city system, and others have graduated or dropped out. Also, the structure of the school system is constantly changing with new schools opening, existing schools closing, and the administrative structure undergoing transition. The results of this modeling study are best seen generically as an indication of the possibilities of differentiating New York City schools on the basis of need and performance and the extent of the concentration of low-performing students and schools that, according to the cited research and data, are long-standing conditions of the city.

## **APPENDIX B**

### **Cost Estimate for Commission's Recommendations**

Listed below are cost estimates for the proposals developed by this Commission. The discussion of each proposal indicates the methods used to develop cost estimates including data sources, key assumptions and the sources of potential error.

#### **1. Class Size Reduction - \$783.6 million**

The first task in assessing the cost of lowering class sizes is to establish the current baseline from which reductions will be taken. Publicly reported class size distributions, as presented in the Mayor's Management Report for example, do not reflect actual class sizes by class or even by school. Rather, they average class sizes systemwide.

Even average class size at the classroom or school level could be obtained, it might not accurately reflect the resources available for organization of classes. Class sizes can be lowered below the level funded by the DOE if a school chooses to divert resources from other programs to lowering class size. Other schools may use their class size funding for alternative purposes. Neither of these effects could be identified if cost estimates were developed based on the currently prevailing class size distribution.

To reconcile this and to use as realistic a base as possible (i.e. the number of children actually in these classrooms) the costing out methodology chosen uses actual enrollment and the averages currently funded in the DOE budget as its class size base:

| <b>Level</b> | <b>Title I</b> | <b>Non Title I</b> |
|--------------|----------------|--------------------|
| Early Grades | 25             | 25                 |
| Elementary   | 32             | 32                 |
| Middle       | 30             | 33                 |
| High School  | 34             | 34                 |

Determining the number of classes currently funded in each grade of each school required simulating class organization by setting a class size cap for each grade and then applying it to the enrollment in that grade. For example, if grade 2 in a school has 60 students then a cap of 28 pupils will generate 3 classes. This methodology applied to all the schools with second grades produces a simulated average class size of 24.9, a figure close to current values. Using FY 2005 projected enrollments developed by DOE for school allocations, the same procedure has been employed to calculate the number of classes produced by both current and prospective funding. The results of the simulation based on the criteria set by the CFE Commission recommendation are as follows:

| <b>Level</b> | <b>Target Cap</b> | <b>Target Average</b> | <b>Other Cap</b> | <b>Other Average</b> |
|--------------|-------------------|-----------------------|------------------|----------------------|
| Early Grades | 15                | 14.1                  | 18               | 16.6                 |
| Elementary   | 22                | 20.0                  | 27               | 24.0                 |
| Middle       | 25                | 23.7                  | 28               | 25.9                 |
| HS           | 25                | 24.3                  | 28               | 26.5                 |



Comparing the simulations of current and proposed school organizations yields the number of new classes needed (12,761). Additional classes are converted into additional teacher positions assuming 1.2 teachers per class are required in primary grades and 1.4 teachers in secondary grades (16,121 teachers). Following the method used by the City in its submission to the CFE judicial panel it is assumed that entry-level staff will be hired to fill these positions. They are expected to be paid an average of \$43,000 per annum plus fringe costs equaling 38 percent of their salaries. The total amount required by this scenario is estimated to be \$956.6 million. However, State and federal grants dedicated to early class size reduction total about \$173 million leaving a net need of \$783.6 million.

## 2. Salary Incentives - **\$658.7 million**

The proposal recommends raising teacher salaries overall by 3 percent. This gain is intended to supplement wage increases negotiated in the normal course of business by the City and the UFT. Teachers in targeted schools will be awarded an additional increase of 23 percent. Of this amount, 16 percent represents additional compensation for additional work due to an extended day (20 minutes) and extended year (4 weeks or 20 days). The remaining 7 percent will be an assignment differential.

The conversion of time into salary is derived from the existing contractual terms governing extended time (ETS) schools and Chapter 683 summer programs. Staff in ETS schools receive an 8.5 percent salary lift for extending their day from 6 hours 20 minutes to 7 hours. The Commission's recommendation proposes only an additional 20 minutes that translates, consistent with the contract, into a 4.25 percent increment. Chapter 683 is a provision of State Education law that mandates a 6-week (30 days) summer program for severely disabled children. Teachers in the program receive a 17.5 percent salary supplement. In the targeted schools, 4 weeks or 20 days of additional instruction is contemplated. A commensurate salary adjustment for staff engaged in the target school extended year is two-thirds of the Chapter 683 percent increase. Combining both of these increases for Target schools produces 16 percent more in pay in exchange for more work.

The base used to value the proposed wage increases was the January 15, 2004 teacher payroll. Percentage increases as proposed were applied to this base to determine direct wage costs. Spin-ups were added for FICA (6.75 percent) and pension (34.6 percent) consistent with the City's customary pricing of general wage increases.

## 3. Mentors and Coaches - **\$140.8 million**

New teachers are to be assigned mentors in the ratio of 5 to 1 in Target schools and 10 to 1 elsewhere. The current staffing ratio is 17 to 1. Literacy and mathematics coaches are to be assigned to Target schools at the rate of 1 coach per 500 and 750 pupils respectively. Assignments in other schools will be at the rate of 750 and 1000 pupils respectively with a maximum of 3 literacy and 2 mathematics coaches per school. The current assignment limit in all schools is one coach per school per discipline.

Using the above rules with school register projections and new hire data, another 332 mentors and 2,040 coaches were determined to be required. It is assumed that experienced teachers will assume these duties to be replaced by new hires. The replacement costs for these reassignments is estimated to \$19.7 million for mentors and \$121.1 million for coaches.

4. Master Teachers: - **\$141.1 - \$233.3 million**

As part of the career ladder, it is being proposed that teachers with exemplary skills be relieved of one-half of their normal duties to assist and train their colleagues. In conjunction with this assignment, they would receive a 10 percent salary supplement with another 5 percent possible for staff with special skills or accomplishments. One Master Teacher will be assigned for every 250 pupils with no more than 3 such teachers assigned to non-Target schools.

A simulation of staffing requirements was performed again using enrollment data as the primary data source. The results are an estimated 3,264 Master Teacher designations should all these positions be filled. The cost of releasing these teachers from their full assignments by hiring replacements is estimated to be \$96.8 million. The cost of proposed salary adjustments is magnified considerably by the expectation that the staff will be recruited from the corps of experienced teachers at the top of the salary schedule who are or shortly will be eligible for service retirement. This escalates the potential pension cost of granting these increases. Master Teachers as a group will resemble current employees with Tier 1 status. Associated with this designation is a 63 percent cost increase attributable to pension charges. Indeed, the City might deem this adjustment as far too modest. With this factor included, it is estimated that a 10 percent increase would cost \$44.3 million and a 15 percent increase, \$66.5 million. In addition, an allocation will be awarded to each school following a formula of \$1,000 per teacher to provide professional development at the individual, group and school level.

5. Beginning Teacher Support - **\$403.0 million**

Based on the January 15, 2004 payroll and the EIS service history record, it appears that the school system hired slightly over 6,000 new teachers for the new school year. It is proposed that these teachers receive additional professional support via being relieved of one teaching period per day that would be directed towards professional and training opportunities. Assuming that the number of new hires remains relatively constant in the future, the direct cost of this initiative is projected to be \$110.4 million. The costs arise since additional new teachers carrying a reduced workload must be employed to cover for the released time. For example, a newly hired elementary school teacher would instruct 20 class periods per week instead of 25. To cover the 5 periods of released time, a fraction of another teacher's time would be needed. If it were a new hire then this fraction would equal 5 periods divided by 20 available teaching periods, i.e.0.25. In

other words, for every experienced teacher leaving the system you would now need 1.25 new teachers to replace that person.

However, the cost repercussions of this change extend into every initiative that results in the hiring of new teachers. Most of the proposals described above will generate additional staffing requirements. Lowering workloads for new hires will force the hiring of 1.25 replacements for each teacher reassigned as a Master Teacher, mentor or coach. Each new class formed due to lowering class sizes will require the hiring of 1.5 teachers in the primary school grades and 1.75 teachers for secondary school grades. The financial effect of this proposal on these initiatives is roughly as follows:

|                  |                 |
|------------------|-----------------|
| • Master Teacher | \$18.2 million  |
| • Class Size     | \$239.2         |
| • Mentors        | \$4.9           |
| • Coaches        | <u>\$30.3</u>   |
| Total            | \$292.6 million |

This amount, in addition to the direct cost of \$110.4 million, totals \$403 million.

6. The Independent Institute for Research and Accountability - \$8 million

This estimated cost will cover the staffing and expenses for this newly created office to evaluate educational reform initiatives, conduct educational research and assessment and tracking of CFE funds.

The total cost of the Commission's recommendations is \$2.227 billion.

## APPENDIX C

### Model Used To Determine Appropriate Class Size Reduction

The Commission's methodology determined that the following caps on class size would produce the following averages for Target and Non-Target Schools:

| Level              | Target Average | Target Cap |
|--------------------|----------------|------------|
| Early Grades (K-3) | 14.1           | 15         |
| Elementary (4-5)   | 20             | 22         |
| Middle (6-8)       | 23.7           | 25         |
| HS (9-12)          | 24.3           | 25         |

| Level              | Non-Target Cap | Non Target Average |
|--------------------|----------------|--------------------|
| Early Grades (K-3) | 16.6           | 18                 |
| Elementary (4-5)   | 24             | 27                 |
| Middle (6-8)       | 25.9           | 28                 |
| HS (9-12)          | 26.5           | 28                 |

A costing out determined that class size reductions in these amounts would cost \$784 million or 14 percent of the \$5.6 billion recommended by the Court.

The Commission heard from hundreds of parents, teachers and advocates on the issue of class size. Considering this and that the Court cited the need to remedy New York City's excessive class size in its ruling, the Commission researched the issue extensively. One proposal in particular, created by New Yorkers for Smaller Classes, a local coalition of parents and advocates, included a costing out and specific recommendations for class size reduction. This coalition proposed two scenarios:

#### **PLAN A**

K -3: limit to 15  
Grades 4 - 8: limit to 17  
Grades 9- 12: limit to 20

#### **PLAN B**

K -3: limit to 18  
Grades 4-8: limit to 22  
Grades 9-12: limit to 25

New Yorkers for Smaller Classes determined that Plan A would cost \$1.15 billion and Plan B \$575 million. The calculation was done by using the present-day average starting teacher salary of \$55,400 including benefits, **current average class sizes** of 22 in K-3<sup>rd</sup> grade, 25 in upper elementary, 27 in middle school and 29 in high school, and general education teacher counts as used by DOE's Bureau of Operations and Review. It also includes coverage, i.e. the costs of providing 1.2 teachers for every additional classroom teacher hired.

The Commission closely reviewed the coalition's costing out and analysis but used a different methodology to generate its recommendation and cost estimate for several reasons.

Publicly reported class size distributions, as presented by DOE in the Mayor's Management Report for example, do not reflect actual class sizes by class or even by school. Rather, they average class sizes system-wide.

Even if average class size at the classroom or school level could be obtained, they might not accurately reflect the resources available for organization of classes. Class sizes can be lowered below the level funded by the DOE if a school chooses to divert resources from other programs to lowering class size. Other schools may use their class size funding for alternative purposes. Neither of these effects could be identified if cost estimates were developed based on the currently prevailing class size distribution.

In order to establish the current baseline from which reductions will be taken, and **to use as realistic a base as possible** (i.e. the number of children actually in these classrooms) the costing out methodology chosen uses **the class averages currently funded in the DOE budget as its class size base:**

| Level        | Title I | Non Title I |
|--------------|---------|-------------|
| Early Grades | 25      | 25          |
| Elementary   | 32      | 32          |
| Middle       | 30      | 33          |
| High School  | 34      | 34          |

Determining the number of classes currently funded in each grade of each school required simulating class organization by setting a class size cap for each grade and then applying it to the enrollment in that grade. For example, if grade 2 in a school has 60 students then a cap of 28 pupils will generate 3 classes, all with class sizes lower than the cap. This methodology applied to all the schools with second grades produces a simulated average class size of 24.9, a figure close to current values.

Using FY 2005 projected enrollments developed by DOE for school allocations, the same procedure has been employed to calculate the number of classes produced by both current and prospective funding.

Comparing the simulations of current and proposed school organizations yields the number of new classes needed (12,761). Additional classes are converted into additional teacher positions assuming 1.2 teachers per class are required in primary grades and 1.4 teachers in secondary grades (16,121 teachers). Following the method used by the City in its submission to the CFE judicial panel it is assumed that entry-level staff will be hired to fill these positions. They are expected to be paid an average of \$43,000 per annum plus fringe costs equaling 38 percent of their salaries. The total amount required by this scenario is estimated to be \$956.6 million. However, State and Federal grants dedicated to early class size reduction total about \$173 million leaving a net need of \$783.6 million.

### Reconciling The Two Methodologies

We believe the costing out model used for the Commission’s recommendations is reliable in that it uses what DOE currently funds, rather than using reported averages. Using our base to achieve the reductions proposed in Plan A, we found that it would actually cost **\$1.569 billion. This is \$419 million greater than Plan A’s estimate of \$1.15 billion.** Using our base to achieve the reductions proposed in Plan B we found that it would actually cost \$731.6 million. This is \$157 million more than Plan B’s estimate of \$575 million.

In addition, the Commission’s recommendation falls between the coalition’s two proposals, allocating 14 percent of the \$5.6 billion recommended to provide New York City students with a sound basic education.

| Class Size Proposals By:               | Cost           | Percentage of \$5.6 billion |
|----------------------------------------|----------------|-----------------------------|
| New Yorkers for Smaller Classes Plan A | \$1.15 billion | 20%                         |
| New Yorkers for Smaller Classes Plan B | \$575 million  | 10%                         |
| Commission                             | \$784 million  | 14%                         |

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