Workforce Quality and Public School Reform

Thank you, John Canning, for that introduction, and Terry Mazany, for inviting me to speak at the Newman Lecture. I'm especially honored to be here, in front of a group that does such important work for our community.

I don't envy your position, though. I'm sure there are plenty of people who would tell you that you have an easy job—after all, you have the pleasure of giving away all of this money! But I know that your job is far from easy. For the Community Trust, it is surely difficult to choose among the many worthy projects that impact so many lives in the Chicago metropolitan area.

At the Fed, our job involves helping the economy fund the growth necessary to add jobs and keep inflation low. And this job isn't easy, either.

So tonight I will give you an overview of the U.S. economy, and then talk about the Chicago economy and one of the keys to improving Chicago's competitiveness with other metropolitan areas. That key is how well our public schools prepare our future workforce.

Now, we all have strong views on education based on our experiences. And I'm no exception. I taught high school early in my career. I also wrote my Ph.D. dissertation on the subject of collective bargaining for public school teachers—but I hasten to add that was many years ago. But most important of all, my wife and I have three children who went to public schools, and we now see those children starting to struggle with the education choices for our grandchildren.

So let me start with the U.S. economy. Over the past two years, the economy has improved significantly. Real GDP—the broadest measure of output in the economy—has grown at an average annual rate of 4.3 percent. Importantly, labor markets have improved; we've added nearly 2.2 million jobs since last April, and employment finally surpassed its pre-recession peak in January.
To be sure, the gains have not always been smooth. But our best assessment is that the economy continues to be on a solid growth path. Although we have had significantly higher oil prices, underlying inflation remains low, and longer-term inflation expectations remain well contained.

About a year ago, with the expansion taking hold more solidly, the FOMC began to remove policy accommodation. But we still have more ground to cover. Otherwise, we risk that some of the increased pressures we have seen recently from higher costs for energy and other items will become permanently embedded in the inflationary mentality of firms and households. So far, this has not happened, and we still believe that monetary accommodation can be removed at a measured pace. But if inflationary prospects do worsen, we will act as necessary to fulfill our obligation to maintain price stability.

Now, naturally, monetary policy deals with the economic prospects for the nation as a whole. But one of the Fed’s distinctive attributes is its regional structure. The twelve district Federal Reserve Banks across the U.S. can ensure that a variety of voices are heard and give the Fed ready access to information from all parts of the country and all segments of the business community.

And our regional perspective is somewhat different from the national outlook. The Chicago Fed oversees an area that contains most of five Midwest states: Illinois, Indiana, Iowa, Michigan, and Wisconsin. This area is heavily involved in manufacturing; with only 13 percent of the country’s population, the district is responsible for 18 percent of the manufacturing output. Our reliance on manufacturing means that the regional economy faces some different challenges than the nation as a whole.

Following a robust performance in the 1990s, the economy in the Midwest has lagged that of the nation. In no small part, we fell behind because of the general weakness in manufacturing rather than any changing fundamentals in the Midwest. Though it has not yet recovered fully, the region is now participating more in the national expansion, reflecting the boost to manufacturing from growth in both domestic business investment and exports abroad.

Chicago’s economic performance has been similar to that of the Midwest. Increasing employment opportunities in the 1990s led to double-digit population growth in the Chicago metropolitan area. The central city even experienced modest population growth—the first gains since the 1940s. Over the past few years, the struggles in manufacturing slowed the local economy, but recently, Chicago’s economy is beginning to strengthen again.

One key element behind Chicago’s success is its wealth of talented and resourceful people—in business, civic institutions, nonprofit organizations, and in public service—who are determined to cooperate and pool their collective resources into improving Chicago. This culture and legacy have created an environment that draws people and business to Chicago and keeps them here.

This city has a long and proud history of local commitment and cooperation. Look back to such important projects as rebuilding the city after the Great Fire in 1871, hosting the World Columbian Exposition, building our great museums, and implementing the Burnham Plan. Such efforts have helped shape this city into what it is today. Recent projects tell the same tale. Metropolis 2020, Millennium Park, and Renaissance 2010 are current examples of public and private institutions working together to accomplish more than they could alone.
But I would be remiss to paint too rosy a picture of Chicago's prospects. During the age of mass industrialization and agricultural development, Chicago was the Giant Nexus of the Midwest. We produced goods and transported the great bounty of the surrounding lands. We also financed, insured, and managed the businesses that were the foundation of all of this activity. Today, the picture is very different. Midwest manufacturing and agriculture are producing ever-growing levels of output, but this climbing production has been accomplished—not with more labor—but with less. For the overall economy, this is productivity growth, and it is highly beneficial; it means lower prices and rising standards of living for all American households. But from a midwestern perspective, manufacturing and agriculture are generating fewer jobs. This makes it imperative to develop new employment and new business opportunities to replace the old. It requires us to continue to expand Chicago's markets and influence globally, beyond the Midwest and beyond our previous business activities.

And so tonight, I'd like to focus the remainder of my remarks on just one of the areas in which the Chicago public policy community must focus to help maintain and expand the prosperity of our great city. This is the educational attainment of the city's workforce. We all know that education makes us better citizens, more informed about the world and more active in our communities. From an economic standpoint, firms now demand highly educated workers. Unemployment is only about 2.5 percent among those with a college degree. But among high school dropouts, the rate is over 8 percent. And we know that each additional year of education tends to raise incomes by about 10 percent.

In some respects, Chicago is doing a good job in creating opportunities for skilled workers. Though Chicago ranks is below average among metropolitan areas for percentage of residents 25 and over with a high school degree, it is well above average for the percentage with college and postgraduate degrees. This educational attainment is a reflection of the many high end job opportunities that Chicago has delivered, as it has evolved from the “city of big shoulders” to “the city with a head on its shoulders.” Chicago has enjoyed robust growth in its professional service sectors since the 1970s, with its central business district and suburban corporate parks creating opportunities in law, accounting, management consulting, real estate, insurance, and finance.

However, our challenge for the national economy is on the supply side rather than the demand side of the equation. That is, we are failing to prepare our young people for the highly skilled occupations that our complex economy now demands. Although the United States has nearly the highest spending per pupil in the world, our students rank well behind those of most other developed nations in math and science. And we are not getting any better. As measured by the National Assessment of Educational Progress, the average educational achievement of our nation's students has barely budged over the past 30 years, with little convergence across ethnic and income groups. This is despite a 50 percent increase in real spending per pupil and reductions in average class size.

Now, I believe it is very important that our schools receive adequate resources, and this requires substantial funding. But simply spending more is not enough—we need to look for other solutions to improve our schools.

Of course, the solutions depend on the problems, and on what policy can or should do about them. And we can all speculate on this question: Is it a classroom education problem? A cultural problem? A parenting problem? A drug problem? Since we cannot possibly discuss all of these topics, I am going to aim my comments tonight at what goes on in the classroom, focusing on solutions that will improve the quality of teaching and introduce more competition in public education.
One good place to start is where the “rubber meets the road,” that is, where our teachers interact with their students. Teaching is a very difficult job. And our Chicago schools are extremely fortunate to have many excellent and dedicated teachers. But we clearly need more. Teacher quality matters greatly for student achievement. Several carefully designed research studies from across the country show that better teachers can raise student test scores significantly. To give you some idea of the magnitude, Dan Aaronson and Lisa Barrow of our staff found that an average student in the Chicago Public Schools with an excellent math teacher scores about 20 percent higher per year on standardized exams than a student with an average math teacher. (They define an excellent teacher as one who is rated two standard deviations above the mean in teacher quality.)

So what can we do to improve our teacher corps? Can we simply sort through our teachers, identify the ineffective ones, and then replace them? Well, that's not so easy to do in our current system.

Surprisingly, the typical credentials that determine compensation in our schools today—advanced degrees in education, certification, years of teaching experience—do not help much in identifying who the effective teachers are, as Aaronson and Barrow also found. Their research shows that these factors account for only about 3 percent of the variation in teacher quality.

Can we substantially improve the effectiveness of our teachers through enhanced training? While we know that teachers matter, we know less about programs that could improve the quality of our teachers. Research shows that having a math or science degree is helpful for teaching those subjects. Specific skills do matter. But since the general education credentials seem to matter little, existing and traditional teacher training programs—including those colleges specializing in education—apparently don't do the job. There are heroic efforts and exemplary program models underway to improve teacher preparation here in Chicago—including better recruitment strategies, mentoring, and enhanced training academies. These programs have been generously funded by the business and philanthropic community. Still, they do not reach the majority of our teaching corps.

Blunt instruments, such as raising teacher salaries across the board, also do not look promising. Raising salaries would attract and keep better teachers, but it would also encourage many poorly performing teachers to remain on the job even longer—in other words, such a policy would be a slow and expensive way to raise teacher quality. And, even with higher salaries for new teachers, excellent teachers will find themselves hostage to rigid pay scales that do not compensate them for their excellence, nor be able to advance their careers without leaving the classroom.

However, one important finding from studies of teacher quality and student outcomes is that high-quality teacher performance tends to persist from year to year. This means that we can predict good teachers from their past performance. So, through observation and timely assessment of data on student achievement, a motivated and empowered school principal could accurately identify high-quality teachers.

Therefore, we know some of the ways in which we can build a higher quality teacher workforce—and reasonably quickly. It will require a system that starts with more selective hiring, includes a lengthy apprenticeship with comprehensive evaluation, and follows up with regular, rigorous personnel evaluations with pay-for-performance rewards. In addition, we should have higher pay for teachers in subject areas where it is more difficult to find qualified instructors, such as math and science.
So far, so good. But what kind of systemic changes can actually bring about such personnel policies—indeed, ones that are taken for granted in many other professions and businesses? Unfortunately, public education has many elements of a monopoly—a publicly owned and operated monopoly. And consumers are served far better in just about any market when there is competition by many as opposed to having just one provider.

So I believe that systemic change in public education would be encouraged and accelerated by the infusion of market incentives. Choice and competition have the power to lead us to better educational outcomes. Their inherent incentives could spur independent schools to innovate, keep costs low, and better serve the students. It would also encourage the existing schools to improve.

In competitive environments, successful firms and organizations discover their customers’ needs. They make strong and innovative efforts to tailor their services to meet those needs at a reasonable cost. When doing so, they adopt pay for performance and other types of personnel and compensation practices that we should be aspiring to in the education profession.

Such market forces have worked elsewhere in education. The university system in the United States is our prime example—it is a testament to the benefits of choice and competition. Though higher education is not without its problems, on a recent ranking in the Times of London of the world’s 200 top institutions of higher learning, U.S. colleges and universities claimed 62 spots, including 7 of the top 10.

A competition of sorts is taking place here involving elementary and secondary education. Chicago is competing with New York, Boston, Atlanta, Toronto, Madrid, and Tokyo to attract the best and brightest of the nation’s and the world’s citizens—those citizens who would populate Chicago’s corporate headquarters, R&D labs, opera companies and even the baseball bullpens at Wrigley Field. Chicago is also competing with such global cities to produce the best and brightest workers and entrepreneurs. But this is a competition that I fear we cannot win without systemic changes.

One obstacle to bringing about this change is, of course, the fear of failure. Innovation is risky and the learning path is seldom a straight line. The answers cannot be fully known ahead of time. For organizations that are trying to make a difference in the community, such as the Trust, the Civic Committee, and others, not all new projects will be successful. And we all have felt the sting of criticism aimed at well-meaning projects whose results fall short of the ideal. But we can’t let this stop us from trying to fix our failed system. In fact, some of the disappointments may be better than the status quo.

Systemic change is difficult, especially when some groups are focused on preserving the status quo. Some of those are workers in the education system worried about changing the system that provides their livelihood. But I believe most education professionals will find it more satisfying to work in a school system that takes advantage of choice and competition to raise the quality of education.

To the doubters, I would say: just look back on what we have accomplished so far in Chicago—who would have believed it? Our public schools have begun to innovate and experiment with new ways to give local residents broader choices among schools and a larger voice in their community schools. The school system has begun to implement new models of local administration to reconstitute some of our lowest-performing schools. The Renaissance 2010 program just getting underway, with the strong support and involvement of the business and philanthropic community, is an ambitious part of this effort. It aims to create 100 excellent schools—charter schools, contract schools, and other schools with more inde-
dependent and entrepreneurial leadership. These schools have more freedom to innovate because they are less encumbered by the historic layers of rules and procedures. In some instances, schools will exercise greater latitude to recruit and choose their own staff and to evaluate and reward their performance. Such an environment will surely attract teachers with desire, drive, talent, and commitment.

Renaissance 2010 schools will stay in operation only as long as they “deliver the goods” to their deserving customers. They will be held accountable in two ways. First, Renaissance schools can expect close scrutiny and rigid assessment by the Chicago Public Schools administration—not of their pedagogy and procedures, but of how well their students perform. Second, the parents will be able to review their options and, if they choose, move their children to another school—just as many suburban parents now do.

Looking forward, we can take what we learn from the 2010 effort and apply its lessons systemwide in Chicago and elsewhere in the state. The challenge of making successful such programs will not be easy, nor will it be cheap. But it is only by being willing to try something new, experimenting, and risking failure, that we have any chance to improve our schools and our community. Each one of us in this room tonight has both a vested interest in the outcome and an opportunity to make a difference.