

RECLAIMING THE PROMISE OF CAREER AND TECHNICAL EDUCATION

Keynote Address

Randi Weingarten

President

American Federation of Teachers and Albert Shanker Institute

Prepared for Delivery

To the Conference on

Fulfilling the Promise of

A Quality Education For All:

21st Century Career and Technical Education

Co-sponsored by

The Albert Shanker Institute

The United Federation of Teachers

New York City

October 10, 2013

Reclaiming the Promise of Career and Technical Education

The promise of American education has been one of economic opportunity and democratic citizenship. We tell our students that if they work hard, achieve academically and complete their education, they will be able to find good jobs, lead productive lives and participate fully in our democracy.

Yet for most of the 20th century, American schools unfortunately fell far short of that promise. Our system of education was tracked into two different classes of students, separate and unequal. One class was recruited into rigorous academic programs that led to post-secondary education and white-collar, professional employment. The other class was pushed into vocational programs that led directly to blue-collar and pink-collar employment. The first class of students was taught to use their minds well to prepare them for intellectual labor as the molders of the world. The second class of students was taught to use their hands well, as they were believed to be destined for a life of manual labor. The first class of students was groomed to be active citizens, and helping to shape our common purposes as a people and a nation. The second class of students was expected to work in factories, where they could potentially command middle class wages, but more importantly never expected to be empowered as policymakers, as the movers and shakers of our democracy.

Throughout its history, the American Federation of Teachers has fought against this two-class education system. One of the AFT's earliest members and leaders, the educator and philosopher John Dewey, offered a thoughtful critique. The problem with traditional vocational education was not that it prepared students for their lives of work, and certainly not that students would learn different crafts by actually practicing them in the school setting. Dewey was a strong proponent of "learning by doing." Rather, for Dewey, the problem was the way in which 20th century vocational education was separated from education for intellectual labor and education for democratic citizenship, based on the classist assumption that working Americans did not have – and could not acquire – the intellect or wisdom for productive self-rule. The problem was that traditional vocational education was focused on creating a docile workforce for unskilled, manual labor jobs, not leaders for our democracy.

Reclaiming the Promise of Career and Technical Education

In an American society divided by race as well as class, 20th century vocational schools often tracked students of color into dead-end jobs, jobs that offered no prospects for economic or social improvement. In the wake of *Brown v. Board of Education* and the movement to end racial segregation in our schools, America's two-class system of came under increased scrutiny. Particular attention was paid to vocational schools that were not providing a quality education on par with academic schools. With the emergence of our new global knowledge economy, unionized industrial jobs that can support a middle-class life have become almost impossible to find. It is rarely possible for a young person to drop out of school or college, and still find decently paid blue-collar employment in a factory or on the docks. It became more and more obvious that our second-class vocational education system worked for no one; not our students and not our nation. American education had to change.

But change comes slowly. In far too many instances, school systems have not been engaged in the hard and necessary work of rethinking and retooling secondary education for the careers of a rapidly changing workplace. Instead, many districts took the quick and easy route and just eliminated vocational education. All schools, it was decreed, would be academic, college preparatory schools. This was a tragic mistake, paid for in the educational failures of students who would have been well served by high-quality Career and Technical education. For many students, an education that's directly connected to a good paying job and meaningful work is precisely the motivation that students need to complete their schooling or take it further.

This conference has brought together educators, workforce specialists, education policy experts, business and union leaders, scholars and government officials to plot out the future of Career and Technical Education. We are all gathered here because we believe that the promise of a quality education for all can and must be met, and that high-quality 21st century Career and Technical Education is vital to fulfilling that promise. For us, 'Career and Technical Education,' or CTE as it is often called, is not just a rebranding of the old 'vocational education,' but a

Reclaiming the Promise of Career and Technical Education

fundamental reconceptualization of how we educate students for citizenship and the careers of the knowledge economy.

Following the organization of this conference, I want to address three themes about the retooling of CTE:

- What is high-quality Career and Technical Education?
- How does high-quality Career and Technical Education open up avenues of greater opportunity for all students, and especially those who have historically been denied the full benefits of American education?
- What policies must be adopted to develop and support high-quality Career and Technical Education programs?

What is high-quality Career and Technical Education?

The reality of today's knowledge economy is that 21st century jobs require that workers to be skilled both with their minds and their hands. Even traditional blue-collar and pink-collar jobs have changed radically in the last decades, as intellectual labor has become an essential component of more and more employment. It is no longer possible to become a car mechanic, for example, without mastering the computer systems and algorithms that control all of the main functions of today's modern automobiles, or to become an office assistant without mastering various computerized programs, systems and databases. What is more, today's jobs are being constantly transformed, as advances in technology revolutionize industries and services. The jobs into which today's students graduate will morph continuously over the course of their lifetimes.

These rapid changes in the demands today's jobs make on workers have profound implications for Career and Technical Education. The old supposition of 'vocational education' – that we do not need to teach an entire class of Americans anything more than a basic set of manual skills – is now obviously wrong-headed. John Dewey's insistence that workforce education must include education for both intellectual labor and manual labor has become an essential foundation of high-quality Career and Technical Education. What is more, the dynamic nature of 21st century jobs requires that students are taught more than a discrete set of skills; they must be taught how to use their minds well so they can acquire the new

Reclaiming the Promise of Career and Technical Education

knowledge and skills their jobs will demand over the coming years. Given the demands of education for knowledge economy jobs, Career and Technical Education cannot be limited to secondary education, but must become a vital component of post-secondary education.

For six years during the 1990s, I taught at a Career and Technical Education high school in the Crown Heights section of Brooklyn, *Clara Barton High School for the Health Professions*. One of the classes I taught at Barton was a Social Studies class for the Practical Nursing students. Long before the Common Core and today's emphasis on integrating academic and career technical content, we took Participation in Government, a public policy course for high school seniors, and transformed it into a class on Medical Ethics for the Practical Nursing students.

The class examined issues involving the entire health care system:

- Is access to quality health care a fundamental human right?
- Does government have the responsibility to ensure that every American has access to such care?

And the everyday ethical issues that health care professionals confront in their work:

- Should terminally ill patients have the right to end medical treatment?
- Should stem cells from human embryos be used to provide medical treatment for the ill?

Some of my fondest memories of teaching come from that class.

Barton's students can graduate with a Practical Nursing license, the technical skills to work in a dental or a vision (eye-glass) laboratory and the ability to manage computerized medical information in office settings. With this foundation, many Barton graduates have been able to pay for advanced education, including medical school.

But in the sixteen years since I last taught at Barton, every one of these fields has been revolutionized by new medical technologies. In the coming decades they will be further transformed by advances in medicine and in technology. A high-quality Career and Technical Education can't just teach students for these health professions as they now exist; it must also equip

Reclaiming the Promise of Career and Technical Education

students with the knowledge and the flexible skills that will make it possible for them to adapt to the jobs of the future. The goal of educating all students to become life-long learners can no longer be a pious platitude; it must become a reality.

Because the organizers of this conference believe in the power of John Dewey's "learning by doing", tomorrow morning we will take you to see first-hand one of six cutting-edge New York City public schools, exemplars of high-quality Career and Technical Education.

Some of you will take a ferry to visit the *Urban Assembly New York City Harbor School* on Governor's Island in the middle of the New York harbor. You will see students learning the world of aquaculture through a Billion Oyster project to restore this basic species to the harbor; students engaging in project-based learning by building a replica of a 19th century sloop; students doing marine biology research, such as studying the effect of concrete on various marine species; and students taking up ocean engineering by designing submersible, remotely-operated vehicles.

Others of you will visit P-Tech, short for *Pathways in Technology Early College High School*. As an early college school, P-Tech combines high school with two years of post-secondary education, allowing students to graduate with Associates degrees in computer systems technology or electromechanical engineering technology. Working with industry partner IBM and the City University of New York, P-Tech provides its students with the skills and certifications to acquire jobs in the information technology field.

Aviation High School educates its graduates for work in high paying aviation mechanics and aerospace industry jobs. It provides a fifth year of studies that prepares students for the 'Airframe' and 'Powerplant' Federal Aviation Administration licenses, and houses an advanced physics lab and program for college-bound students. Those of you who visit Aviation High School will see students engaged in project based learning such as the recent overhaul and restoration of a 1969 Cessna 150K airplane.

Reclaiming the Promise of Career and Technical Education

In partnership with the NYC Transit Authority and the Transportation Workers Union, *Transit Tech High School* educates students for jobs in electrical, electronic and computer-based industries. Graduates are employed at the Transit Authority, the Long Island Railroad, and local utility companies Con Edison Electric and National Grid, among other places. When you visit Transit Tech, you will see students learning how to maintain trains by working on an actual New York City subway car.

Food and Finance High School provides instruction in urban food production, with a focus on the culinary arts and the entrepreneurial skills of managing restaurants and food services. Students can earn one of three food-handling certifications, and enjoy paid internships in some of Manhattan's best restaurants. Visitors to Food and Finance will see students grow fruits, vegetables and tilapia in labs, in cooperation with Cornell University Cooperative Extension.

Thomas Edison High School provides a wide array of CTE programs including Automobile Computer Aided Design and Mechanical Drawing, Engineering and Robotics, Information Technology and Medical Pharmaceuticals, among others. When you visit Thomas Edison you will see one of highest performing schools in New York City, with almost 95% of its students going on to post-secondary education, and over 80% receiving state certification in the career and technical field they studied.

Rather than a track to nowhere, these six schools provide students with multiple pathways to success, including skills and certification to enter the workforce and rigorous foundational skills for further education and training. They are high-quality Career and Technical Education, and they provide a model for what we should aspire to in *all* Career and Technical Education programs.

There is one more thing that these six schools have in common: these are schools where teachers and supervisors, union and management, collaborate and work together to ensure that their students receive the absolutely best education they can provide. In these schools, Career and Technical teachers have a real voice in important educational decisions

Reclaiming the Promise of Career and Technical Education

about their students' education. And these are schools where business and union in an industry come together to support an education that will send highly qualified, well-educated entrants into their fields. These Career and Technical Education schools should be our beacons: their respect for teachers and teacher voice and their cultures of collaboration are the necessary foundation for educational accomplishment in every school.

The president of the United Federation of Teachers, my friend Michael Mulgrew, taught for many years in a Career and Technical Education school, William Grady High School. His tireless work on behalf of Career and Technical Education, undertaken in partnership with those responsible for CTE in the New York City Department of Education, has been responsible for advancing this absolutely vital work in the New York City public schools.

How does high-quality Career and Technical Education open up avenues of greater opportunity for all students, and especially those who have historically been denied the full benefits of American education?

Done right, high-quality Career and Technical Education does more than provide graduates with employment in good paying 21st century jobs, more than establish a solid foundation for further education. It makes a vital connection for students between their high school educations in the here and now and a tangible, desirable future. For adolescents who often have difficulty seeing beyond their immediate needs and wants, it creates a bridge to the future that starts with their high school studies, giving them strong motivation to complete their schooling, even when it extends into post-secondary education. Just as importantly, the Career and Technical Education focus on real world skills delivers a sense of real accomplishment and pride in one's work that fuels dedication to and concentration on one's studies.

For students living in poverty and at risk for dropping out, Career and Technical Education can be the key to finishing the education and finding the employment that will break the vicious cycle of impoverishment. Unlike the economic 'dead end' of low wage, unskilled jobs that were the hallmark of traditional 'vocational' education, high-quality Career and Technical

Reclaiming the Promise of Career and Technical Education

Education provides a clearly defined pathway to a productive life doing meaningful work.

What policies must be adopted to develop and support high-quality Career and Technical Education programs?

Although Congress doesn't seem to be doing very much right now, the process has begun to reauthorize the Perkins Act, the primary federal legislation for supporting Career and Technical Education. It is important that we establish a clear policy agenda for the ongoing development and support of high-quality Career and Technical Education. Let me focus on a few key points in a Policy Agenda for Quality Career and Technical Education.

First, Congress must complete the reauthorization of the Perkins Act with full funding for Career and Technical Education. To support a strong system of high-quality Career and Technical Education around the nation, the Perkins Act should remain a formula grant designed to provide funding to districts and schools that make a commitment to high-quality CTE programs. We cannot turn the federal government's Career and Technical Education funding into a program modeled after Race to the Top, in which some schools and some students are 'winners' and other schools and other students are 'losers.' What is especially wrong with this model is that the schools and the students with the greatest needs are often made into the 'losers.'

Second, the grants provided by the Perkins Act must be targeted where they will be most effective. It is particularly important that the funds are not swallowed up by state and district education bureaucracies, but find their way to the secondary and post-secondary institutions that are providing high quality Career and Technical Education programs.

Third, in order to ensure that Perkins Act funds **high-quality** Career and Technical Education, the elements of a high quality program need to be further defined. High-quality Career and Technical Education is found in accredited programs that are aligned with rigorous standards such as the Common Core and the Common Career Technical Core. Such programs

Reclaiming the Promise of Career and Technical Education

base themselves on public-private partnerships with businesses and unions in an industry, and build connections and alignment between secondary and post-secondary education.¹ They employ sustained and focused professional development for their educators, and focus on the integration of academic and career-technical content. Where possible, they provide internships and other work based opportunities for students.

I'd also like to say a few words here about the relationship between the K-12 Common Core to Career and Technical Education. The Common Core requires an instructional shift to higher standards that are focused on the knowledge and skills that are truly important for citizenship, for college preparation and for work in a 21st century knowledge economy. Properly implemented, with supporting curriculum, teaching resources, professional development and time for teachers to work together, the Common Core will prepare every student to be a democratic citizen and a productive member of society.

It is important to understand that high-quality Career and Technical Education provides a particularly fertile ground for the successful implementation of the Common Core's goals. Challenging Mathematics, Science and English Language Arts are not only embedded in Career and Technical Education courses, but take the very form that the Common Core standards envision. For example, the Mathematics required for Career and Technical Education subjects is the problem-solving Mathematics, set in practical contexts and used to address real-life problems, which the Common Core demands. What is missing in American K-12 education today is the recognition that these core academic subjects are embedded in Career and Technical Education, such that CTE instruction should count towards a portion of the high school graduation requirements in these academic subjects. As a consequence, we often subject our CTE students to unnecessary redundancies.

¹ Secondary and post-secondary education programs should be aligned wherever possible; the rigorous 'programs of study' laid out in the Perkins Act provide models for such alignment. Concisely put, a 'program of study' is a structured sequence of academic and career and technical education courses that lead to a post-secondary-level credential.

Reclaiming the Promise of Career and Technical Education

Fourth, the accountability system of the Perkins Act needs to be overhauled to provide many fewer and more meaningful measures, using data that are readily available. At the secondary level, measures such as high school graduation and career and technical certification are particularly important, and should be the focus of accountability. At a post-secondary level, the attainment of credentials and placement in appropriate employment are central.

Fifth, the Perkins Act can be used to establish an Innovation Fund to seed new and promising practices in Career and Technical Education, provided that additional monies, over and above current Perkins Act funding, are specifically earmarked for this purpose.

Finally, it is important that there is alignment and common action among the various federal government agencies funding different components of Career and Technical Education. Specifically, it is crucial that the Perkins funding and the College Work-Study funding provided by the Department of Education and the apprenticeship programs funded by the Department of Labor all work together to provide high-quality Career and Technical Education opportunities to the students who need them the most.

If we are able to make progress toward the adoption and implementation of this policy agenda, high-quality Career and Technical Education will become the vital part of American education that it can and must be. When we reclaim the promise of Career and Technical Education, we fulfill the promise America has made to all of its families and their students – a quality education for all.