The National Commission on Teaching and America’s Future, based in Washington, D.C., is a research and advocacy group with the goal of moving teaching into the twenty-first century. The group is co-chaired by former secretary of education Richard Riley and past president of the Education Commission of the States, Ted Sanders. To create twenty-first-century schools, we’re going to need to develop a twenty-first-century education workforce. The human capital management strategies we used in the twentieth century are not going to get us there. Twenty-first-century teachers need better curriculum strategies and better ways of instruction; they need to be able to diagnose students, to do assessments, and to work with the community. We’re asking today’s teachers to do an impossible job. Teaching has become increasingly complex, and it’s beyond the abilities of any single individual to do it. What we need to address is that the idea of a highly qualified teacher in every classroom is a concept whose time has passed; the era of the standalone teacher in a self-contained classroom is over.

**Learning Teams**

A twenty-first-century teacher needs to be able to work as part of a team, just as is done in every other sector of the economy. There are legal teams, medical teams, teams of firefighters, teams of mechanics; no one in any field in the twenty-first century works alone. They work in teams composed of people with different levels and areas of expertise. Together, they’re stronger and able to do more and perform at a higher level than could any single individual. There is an urgent need to move to a new model of teaching, and we have an unprecedented opportunity to make this transformation happen. According to data from the U.S. Department of Education’s 2003–2004 Schools and Staffing Survey (SASS), the trend lines in teacher attrition have been steadily rising for the last fifteen years (U.S. Department of Education)
And although we’ve been increasing the supply of teachers, the attrition rate has been increasing even faster. It would be easy to attribute this to the retirement of the baby boomers, but that is not the case; non-retirement leavers outnumber retirees by three to one. These are young teachers—the bright, young tech-savvy educators that we’re counting on to create the schools of the future—and they’re coming into our classrooms feeling unprepared for the challenges they face, deprived of the support they need to succeed, and unable to see a rewarding career path in front of them. And it’s not just about pay for these young teachers; pay matters, but it’s more about how they can continue to grow, to learn professionally, to advance, to take on new challenges. These teachers are part of the millennial generation. Their friends have exciting, challenging jobs in which they collaborate with their colleagues and have a real voice in their work—not just speaking up but actually shaping the nature of the work and creating new work for themselves—and these teachers don’t have that in their standalone classrooms. They’re working in isolation. They grew up in the twenty-first century and we’ve got them doing a factory-era job, and so they’re walking.

The other thing we need to contend with is teacher retirement. Florida has seventy-six teachers in their seventies still in the classroom. In 2004, 53 percent of our teachers were baby boomers—that’s almost 1.8 million teachers (U.S. Department of Education 2003–2004). These teachers, who have been at the core of our success, have been marching along in their careers, and now they’re getting ready to exit. So over the next five years, the profession could lose 30 percent of its young teachers and 40–50 percent of its accomplished veterans. Unless we come up with a different workforce development model, some school systems are going to collapse because they won’t be able to sustain their school staffing. And while we’ve always been worried about those school districts that are struggling, some of our highest performing school districts—where most of those boomers are fifteen- to twenty-year veterans—are in for a rude awakening. These schools have built their performance on stalwart teachers who have been in the career for decades, and they’re about to lose that huge chunk of their workforce. And when they do, they’re going to be scrambling unless they come up with another plan. Through a Gates Foundation grant, we were able to do some analysis on the 2003–2004 SASS data. Our projections showed that for the 2008–2009 school year, there would be nineteen states in which 50 percent of the teachers were over the age of fifty. Now that we have actual data for
2008, I can report that there is not one state in which 50 percent of the teachers are over fifty. And why is that? Because over 300,000 boomers left the workforce between 2004 and 2008. This is not good in terms of the experience base of the teaching workforce. We’re looking not at age but at the years of teaching experience. In 2004, half of the teachers in the country had less than twelve years of experience in the classroom; for 2008, it was eleven years of experience. If we let all those boomers march out the door, that experience level will go right along with them. And replacing half our workforce—including some of our most accomplished veterans—with green recruits is an impossible task. We can’t recruit our way out of this, and even if we could, it wouldn’t be a good bet in terms of teaching quality. So where is the future workforce going to come from? Digital-age young people are eager to work in education if they can work in a collaborative learning space. The world they live in provides the most powerful learning environment we’ve ever had outside of schools. Seventy percent of boomer teachers say they want to stay in the profession, but they don’t want to stay as standalone teachers. They’ve done that for twenty-five years, and they’re done with it. They want to be mentors, coaches, team leaders; they want to be given new roles and challenges—as do principals. In 2004, the average age of a school principal was fifty-six. Realistically, we’re not going to be able to keep 1.7 million boomer teachers, but if we could focus on the top 10 or 20 percent, we’re still talking about 200,000–300,000 accomplished educators. In the workforce as a whole, there are 78 million boomers. Half of those workers say that when they retire, they want to embark on an encore career focused on giving back to their communities (MetLife Foundation/Civic Ventures 2005), and half of those workers say they want to do it in education and youth programs. So half of 78 million want to be engaged, and half of those want to do it in education—that’s almost 20 million people from the largest, most accomplished, well-educated workforce we’ve ever had. But if 20 million people showed up at school on a Monday morning and said, “We’re here to help,” we wouldn’t know what to do with them; we’d be turning them away.

A Different Model

To offset the loss of experience of the baby-boom generation of teachers, we need to develop collaborative learning teams of veterans and beginners. We
call them learning teams because we are living in the learning age—a time when learning is no longer just preparation for the job but the job itself. Students today will work in various learning organizations throughout their lives. We need to recognize that and create schools that can develop these learning-age competencies, and our teachers need to be able to practice them. These competencies can’t be taught; you have to live them, and thus schools need to be organized so that they look and run like the rest of the world. We call them learning-age competencies; others call them twenty-first-century skills. In fact, these skills are timeless; they are skills we’ve used all along to create and evolve our innovative culture. These learning teams will work in an open learning economy, using technology to customize learning. Learning environments will be co-created and personalized, with students and teachers working together. It’s not about grade levels anymore; it’s about a common set of standards and each student following his or her own path to get to those standards. These learning teams will transform schools with a communal sense of responsibility. There will be no more top-down managed change but empowered change. The teams we’re working with are being set up in learning studios. Like design studios, architecture studios, and dance studios, they are places where educators perfect the craft of learning and facilitate other people’s learning. The important thing to recognize is that in this new world, schools are no longer the learning place; schools are hubs in a network of learning organizations. We’re not bringing technology into schools but using technology to bring schools into a wider network of learning opportunities—and teachers need to be able to manage that. Are we ready for this kind of change? The rest of the world is already doing this. I’m a cultural anthropologist, and when I watch television, I see the culture evolving. In the fifties, we had *Perry Mason*. Today we have *Law and Order*, *CSI*, and so on. What’s the difference? Before we had a stand-alone hero—who, by the way, was always a white male—who knew and could do everything he needed to do to solve the case, whether it be forensics, fingerprinting, and so on. That story line seems ridiculous now, at a time when crime solvers involve learning teams. These teams are made up of diverse individuals—diverse in terms of ethnicity, age, knowledge, and expertise. Team members learn from one another, they contribute to a common solution, and together they’re stronger than any of them would be working alone. That’s the story of the twenty-first century. In early television’s medical dramas—featuring Dr. Kildare or Ben Casey or Marcus Welby—it was the same story: a white male hero takes care of the patient
and saves the day. Dr. Kildare was a GP, but he could also do radiology and surgery—he knew and could do everything. Imagine taking your child to a pediatrician who said, “I’m the only one here. I do the shots, I do the blood work, I do the radiology, I do a little surgery. I do it all.” Surely you’d walk right out of there, and yet we expect a single teacher to know and do everything for a class of thirty kids for an entire school year. That’s not fair to the teacher, and it’s not fair to the kids. Television from the fifties to the present day reflects the changes made in most areas of society; in education, we went from the standalone teacher of the fifties to the standalone teacher of the twenty-first century. That teacher cannot do that job alone, and we have to stop asking her to do it. We all know a great teacher, someone for whom parents fight all summer long with school principals to get. And the students of the parents who “win” are lucky. But down the hall there are students with a teacher who’s struggling, and across town, there are even more classrooms with struggling teachers. As good as that teacher is, she can’t help those struggling teachers, and as good as she is, she can’t learn from accomplished veterans in her same building because they are all working alone, behind closed doors. Where’s her team? We’re asking her to do one of the most complex jobs in the world on her own. We need to be surrounding her with the same kind of support that all those other professions have. Statistically speaking, we know that this teacher started out in 2001 but was gone by 2009, and when she went, she took everything she knew with her. If she had been a member of a team, her team would have been able to preserve all the knowledge and skills they developed and would have been able to replace her with another team member and maintain quality. Instead of losing everything, we need to break out of the idea of standalone teaching. What we’ve been trying to do is fix what we have, but what we need to do is improve what we have with learning teams and move to a transformational model.

As part of this transformation, the NCTAF has been creating learning studios with learning teams. We received funding from NASA to create an earth-science learning studio network in Maryland high schools. Maryland was saying it didn’t have enough STEM (science, technology, engineering, and math) teachers. It just so happens that Maryland has the highest per capita population of STEM professionals in the country, so if we can’t teach STEM in Maryland, we’re doing something wrong. The new learning studios are led by accomplished veteran earth-science teachers, novice earth-
science teachers, and NASA earth scientists—those folks who are getting ready to retire. Following this, Intel came to us and said, “We want to do that.” Last year Intel racked up 1.3 million hours of employee volunteer time in schools but discovered that those employees had been painting classrooms, supervising playgrounds, supervising field trips, judging science projects—all things that needed to be done but that did not take advantage of the knowledge and skills of these software engineers and electronics technicians to improve teaching and learning. So in Rio Rancho, New Mexico, we’re going to work with Intel to create learning teams in which Intel employees who are getting ready to retire will work side by side with teachers on a sustained basis in inquiry-based, project-based learning studios. Again, these learning studios are places where people perfect their craft, and we’re going to designate particularly high-performing studios as educator development studios—places where we should be developing the next generation of educators as apprentices to accomplished educators. We think we can successfully move to a twenty-first-century model but only if we stop thinking that the system we have inherited from the last century—a standalone teacher in every classroom—can be fixed. If we can stop focusing on fixing that system and move on to a system of learning teams, we can develop a twenty-first-century education workforce and, with that, a twenty-first-century education system.

References

