

Crafting a profession for the future requires identifying and responding to a set of emergent realities that transcends the current debates over teaching.

By Barnett Berry

Since the release of the 1996 report of the National Commission on Teaching and America's Future, the clamor for recruiting and rewarding effective teachers rightfully has escalated. The report, *What Matters Most*, made a compelling claim: If ambitious school reforms are to be achieved and students are to meet higher, internationally benchmarked academic standards, then policy makers must ensure that classrooms are filled with well-prepared, skillful teachers who teach in schools designed to support high-quality teaching and learning.

The scholarship and leadership of Linda Darling-Hammond, then the commission's executive director,

BARNETT BERRY is founder and president of the Center for Teaching Quality, Hillsborough, N.C.

Adapted with permission from *Teaching 2030: What We Must Do for Our Students and Our Public Schools — Now and in the Future*, by Barnett Berry. New York: Teachers College Press, © 2011 by Teachers College, Columbia University. All rights reserved.

paved the way for researchers and reformers to grab the attention of policy makers and community and business leaders — with good reason. Over the past 15 years, a surfeit of research has shown how teachers, even in the highest needs schools, can make a big difference in whether students learn. Other studies have highlighted how low-income students and those of color are far more likely to be taught by less effective and the least experienced teachers. More recently, researchers have argued that "value-added" statistical methods can more precisely identify effective teachers — defined as those who generate greater standardized achievement test score gains than their peers who teach similar students.

In the past year, with attention from major news channels, newspaper projects, Hollywood documentaries, and such high-profile talk shows as Oprah and Charlie Rose, the focus on new approaches to identifying effective teachers has intensified even more. But, while all the teacher policy talk may feel fresh to media mavens, for those of us who keep education on our front burners, it appears to be more of the same time-worn critique of teachers and their profession — accompanied by many of the same superficial solutions we've seen promulgated in past reform cycles. Once again, the primary focus on fixing "the teaching problem" is to: 1) recruit academically successful college graduates into classrooms, without much focus on the "how" of teaching; 2) identify and reward effective teachers based on their students' scores on a once-a-year, mass-administered test of a narrow range of skills and knowledge; and 3) exhort current practitioners to hold high expectations for all students and just work harder and care

The assumption held by many of today's reformers is that as long as relatively smart people are recruited into teaching, then all they need to know about how to teach can be easily learned on the job. Teachers do not need to cost a great deal because their training is limited, and many are likely to leave the classroom before they rise far on the salary scale. If they're clever enough, they'll eventually move on to other, more lucrative and important work — either in education or other fields where entrepreneurial skills are valued and exploited. Many people who share this general attitude toward school reform see unions — with their tenure and seniority rules — as outdated institutions that are mostly responsible for America's teaching quality problems and the persistence of the achievement gap between haves and

These familiar reform bromides ignore many issues. On the matter of teacher effectiveness, for example, their proponents pay little heed to the fact that current standardized tests, whose data are used

to feed value-added formulas, are built with 20th-century tools and rest on 19th-century principles of teaching and learning. They also disregard today's classroom realities. The pedagogical challenges of 21st-century teaching and learning — including the enormous impact of new technologies — have redefined what it means to "teach well." Persistent budget tightening and the poor working conditions found in many understaffed and poorly led schools are other factors that undermine a teacher's ability to be effective — and no more so than in the high-needs schools often targeted by reformers.

Many of today's reformers assume that as long as relatively smart people are recruited into teaching, then all they need to know about pedagogy can be easily learned on the job.

Public school critics must recognize that 21st-century teaching and learning will require three things that aren't currently on many reform agendas:

- Teachers who are more skilled in the science and art of teaching than ever before;
- Teachers who embrace their roles as leaders of school improvement; and
- Teachers who have and use a *strong collective voice* to ensure that the needs of all their students are adaptively met.

There is no doubt that many teacher unions are out of step with the demands on schools of today and tomorrow — and that many union leaders are not pushing fast enough to create the profession that teaching must become. But reformers are expending far too much energy on the easiest target. Teacher unions, though still potent, don't hold our public schools back nearly as much as do policy makers and administrators who resist opportunities to develop dynamic teacher leadership that can — in ways that benefit students most — blur the lines of distinction between those who teach in schools and those who lead them.

A DYNAMIC TEACHING PROFESSION

For several years, with generous support from MetLife Foundation, I have traveled on a remarkable intellectual journey with 12 accomplished teachers from across the nation.

We began with an urgent question: What must America do to build a 21st-century teaching profession that can fully meet the needs of students who will enter our public schools between now and the year 2030? We considered teaching's rocky and sociologically complicated past. We examined trends being shaped by the rapid escalation of global communications, economic and demographic realignment, and technological innovation. We built on ideas and ideals that are already influencing public education and student learning opportunities — both here and abroad. And we reached for fresh "third-way" solutions that transcend much of the current policy debate — solutions that not only address the issues we see today, but also anticipate the trends futurists predict will shape education tomorrow. (See "How We Wrote *Teaching 2030*" on page 31.)

The result is our new book, *Teaching 2030* (Teachers College Press, 2011). In it, we argue that for teachers to be effective now and in the future, they must know how to:

- Teach the Googled learner, who has grown up on virtual reality games and can find out almost everything with a few taps of the finger;
- Work with a student body that is increasingly diverse — by 2030, 40% or more will be second-language learners;
- Prepare kids to compete for jobs in a global marketplace where communication, collaboration, critical thinking, and creative problem solving are the "new basics";
- Help students monitor their own learning —
 using sophisticated tools to assess whether
 they meet high academic standards and
 fine-tune instruction when they don't; and
- Connect teaching to the needs of communities as economic churn creates family and societal instability, pushing schools to integrate health and social services with academic learning.

In 2030, the teaching we envision is framed both by emerging technologies and by energetic school organizations fully connected to communities. We do not claim to be soothsayers, nor do we see ourselves as naïve optimists. But we know that we will never create what we cannot imagine. We've shaped our thinking around *four emergent realities*, all driven by the coming age of teacherpreneurs, who play major leadership roles in reshaping pedagogy and policy, locally and globally.

Emergent Reality #1: Students and teachers will experience a transformed learning ecology.

Digital tools will provide an array of choices for instant and accessible information, communication, and self-expression. New technologies — such as today's emerging 3D web environments, augmented reality games, and mobile "smart" devices — will ex-

pand learning opportunities well beyond geographic limits and the traditional 8 a.m. to 3 p.m. school day. Multi-user Virtual Environments (MUVEs) will allow teachers to work with students who access virtual contexts, work with digital artifacts, communicate with one another locally and globally, represent

We will never create what we cannot imagine.

themselves through "avatars," and model problem solving in situations that simulate the real world. My teacher co-author Emily Vickery describes how this new learning ecology creates a large demand for master teachers "who can gather, filter, and distribute customized, meaningful learning via various deliverable designs based on advances in learning theory."

We imagine how, by 2030, Ray Kurzweil's early 21st-century vision of brain cybernetics and nanomachines will allow students to vastly expand their cognitive abilities and make it possible for teachers to spread their teaching expertise more readily to fellow practitioners. We underscore the value of pedagogical experts in a society and an economy that is both deluged with information and dependent on information science. We propose that through the effective use of technological tools, teacher leaders will be able to assemble a rich array of indicators about student achievement and school effectiveness, transforming public accountability in education. Continuous student assessments — driven by such realworld tasks as designing a mid-21st-century school building or developing a community garden and implementing a business plan to sustain local food sources — will be linked to an array of more sophisticated achievement tests that teachers create alongside psychometricians and scholars.

Emergent Reality #2: Seamless connections will be woven in and out of cyberspace.

Teacher leaders will expand student learning opportunities beyond geographic limits, and schools will no longer be entirely dependent on the availability of local pedagogical expertise. As co-author Susie Highley, a school media specialist in Indiana, suggests: "Students will also be logging into their own unique 'metaverse'; once they do, they will likely find a descendent of today's Netvibes or Pageflakes software, fully aggregating the components of their educational experience with guidance from a team of educators who know a great deal about each student's particular learning needs and interests." And Web 3.0 is already upon us, where semantic tagging of content connects different applications to find and

remix information for an individualized experience far beyond anything we've imagined before.

While the flexibility, self-directedness, and sheer reach of online learning is compelling, our co-author and special education teacher Laurie Wasserman reminds us that technology is not a panacea or cheap outsourcing strategy, nor an adequate substitute for human responsiveness. Effective teaching "is never just about what we want to instill in students," she says. "It's also about our ability to respond to their own hopes for the future by respecting them and giving them the tools they require to pursue those hopes." Now and in the future, our unstable economy and the spread of volatile, uncertain, complex, and ambiguous (VUCA) living environments will make the brick-and-mortar school even more important in the future of many communities. As co-

author Carrie Kamm, an inner-city Chicago educator, makes clear: "Even with the technological advances we imagine by 2030, face-to-face interaction will still be a major part of the education experience — with many teachers working as community organizers in full-service schools and helping students gain the knowledge, skills, and self-efficacy needed for the 21st century."

Emergent Reality #3: Teachers will experience differentiated professional pathways and careers.

Teachers will develop specialized skills and work in flexible roles that contribute to the education enterprise. We imagine a profession built on the concept of hybridization, with many expert teacher leaders who are specially prepared and paid as change

How We Wrote Teaching 2030

The creation of *Teaching 2030* has been a true team effort. The concept grew in part out of my long-standing interest in a book that imagines a fully realized teaching profession, finally freed from its 19th-century industrial roots and ready to meet the demands of 21st-century learners. But I could not write this story alone. I have been out of the classroom way too long. Putting expert teacher voices square in the middle of the national debate on school reform is a central mission of the Center for Teaching Quality. I knew that my front-line colleagues in our national Teacher Leaders Network (TLN), with their deep understanding of students and schools today, would immeasurably enrich a book about the future of teaching.

MetLife Foundation's long-standing commitment to invest in projects that build teacher efficacy and spread teacher voice made it a natural place to seek support for what was admittedly an out-of-the-box idea. They totally got it. Our proposal was approved, and we began a search among the 300 members of TLN for a dozen accomplished educators who might collectively represent the diverse experiences of public school teachers in America. My collaborators on this book teach in every region of the nation and serve students through many teaching roles, at many grade levels, in urban, suburban, and rural schools. They span several generations: Some began teaching in the predigital 1970s, while others launched their careers in the new millennium. Most important, they are all committed to a profession defined by high standards and led by its own practitioners.

We began our work in the summer of 2008. Fittingly, our first gathering occurred in the Elluminate Live web-conferencing environment and then regularly in ongoing, text-based, moderated discussions in our own private TLN virtual platform. And while we met face-to-face only twice at CTQ's home base near Chapel Hill, N.C. (and we loved the in-person time together), we have spent well over 100 hours with each other.

In the ensuing months, we delved deeply into an issues-oriented curriculum, studying the works of researchers and reformers, demographers and futurists. Our live online seminars included diverse guests who not only shared their expertise, but also engaged in lively discussions about "where do we go from here." I felt it was important that we dig into teaching's past as well as its future, so we took some time to examine the history of public education in America and how that history has shaped current teaching policy. After our webinar series, each co-author penned a 5,000-word essay about an aspect of teaching's future to provide additional "idea grist" for our writing mill.

Gradually, working as a team and in small groups, we assembled the big ideas and organized them as *emergent realities* and the breakthrough policy levers that could produce the transformed 21st-century teaching profession we seek to achieve. We began testing our ideas with other teaching colleagues, first within our virtual TLN community and later in more public spaces. This process, which took place entirely online, added even more dimension to our vision for the profession's future and enriched our narrative with more voices from the classroom.

Throughout our writing process, we were never afraid to challenge our own conventional wisdom; indeed, we frequently sought divergent thinking and sharpened our own suppositions as a result. Ultimately we have come together, in harmony if not always in lock-step, over an expanded vision for student learning and the teaching profession that will, in myriad ways, continue to accelerate that learning.

Barnett Berry

agents, both working closely with students and playing other roles that advance the learning of their colleagues. Growing numbers of hybrid-role teachers will break the longstanding egalitarian grip of the teaching profession in which novices and veterans are treated alike and are expected to serve in the same roles. Co-author Kilian Betlach put it plainly: "First, we ask new teachers to do too much with too little preparation, and then we ask too little of them in what should be the second stage of a teaching career."

New technologies will enable students to vastly expand their cognitive abilities and make it possible for teachers to spread their teaching expertise more readily to fellow practitioners.

While reformers continue to fight over the merits of traditional university-based teacher education versus school district-based alternative certification programs, we envision a clearly professional model for the future. Teachers with different capabilities and career commitments will join in collaborative teams to maximize the strengths of their respective (and diverse) preparation, experience, and knowledge in teaching both in brick-and-mortar and online settings.

Most important, these teams will be led by deeply prepared master teachers who graduate from intensive teaching residency programs. These specialized schools of pedagogy will have evolved dramatically from the early 2000s, and teacher leaders will have the skills to teach in community centers that operate 24/7, as well as in cyberspace. These new "schools of educations" are built from un-siloed institutions and will join universities, school districts, community-based organizations, and worldwide virtual networks of teacher leaders. Under the leadership and orchestration of these master careerists, every student will benefit from a high-quality teaching environment in every learning situation. Teachers will be able to negotiate their base compensation, much like university professors currently do, based on their experiences and past performances in and out of the classroom. Some will be the highest paid individual in a school district as career lattices transform how teachers are used and compensated.

The teaching profession of the future will promote the idea that talented individuals can enter, advance, exit, and re-enter via multiple paths. At the same time, teaching will continue to have an ample core group of highly effective career teachers who guarantee quality and stability for their local schools by serving in a variety of leadership roles. As co-au-

thor Shannon C'de Baca notes: "The work of 21st-century teaching is too much to fall on the backs of any one teacher. We need a fluid profession that allows different types of teachers, all well prepared for their roles, to focus collectively on the needs of students."

Emergent Reality #4: Teachers will become teacherpreneurs and foster innovation.

Teaching will become an adaptive profession that empowers and rewards members who develop their pedagogical talent, spread and "sell" their expertise, and find innovative solutions to challenges facing their students. The concept of teacherpreneurism isn't primarily about making more money (though we find little reason to deny expert teachers the opportunity to participate in the marketplace, so long as their activities serve the best interests of students). My co-author Ariel Sacks, a charter school teacher in Brooklyn, N.Y., draws on a current corporate example to suggest one way to restructure the teaching profession and create growing numbers of teacherpreneurs: "In order to break away from the hierarchical structures that keep us losing great teachers and moving at a snail's pace, we'll need to carve out significant time, like Google's 20% [employee innovation time], or even up to 50% for some, to expand teachers' roles as leaders and innovators who are able to respond better and faster to the needs of students."

Part of teachers' self-directed learning time could be used to connect to other teacherpreneurs and to develop special capacities to solve knotty problems or meet identified wide-scale learning needs. In her talk at ISKME's 2010 Big Ideas Fest in Half Moon Bay, Calif., Ariel literally sketched out her role as a teacherpreneur in 2030, when tenure means one has passed performance metrics and now has more time to spread teaching expertise. Her vision of a teacherpreneur's career begins with close tutelage by a master teacher (in her own case, through Bank Street College) and spirals upward.

When we conceptualized a national teacher workforce that would include 600,000 teacherpreneurs, we were careful never to lose sight of the pitfall created when students from vastly different backgrounds have to "bid" through their adult intermediaries for teachers' services. We believe teachers themselves can help governments and school districts make the best choices about where to allocate resources and how best to connect students and parents to the vast opportunities available. The model of teacherpreneurism, as our Mississippi Delta coauthor Renee Moore reminds us, must not drive a wedge further between the haves and have-nots. Ultimately, teacherpreneurship is not so much about establishing a new income stream for individuals as

it is about propagating a new culture of innovation and creativity in a sector — education — that has been woefully lacking in these qualities. Most important, teacherpreneurship is not promoting a free-market vision for the profit of a few, but it is exploring how the American public can invest substantially in teachers who can expertly serve millions of children and families not in a position to choose "a better school somewhere else" or find the best online teachers anytime, anywhere.

Many of the building blocks for teacherpreneurism can be found scattered throughout the worldwide population of teachers and schools. But how does America begin to take such learning systems to scale? How do we create large numbers of teachers who earn more than some school superintendents, have the respect of an endowed chair at a research university, and have the skills and time to spread and market their pedagogical and policy ideas across organizational and geographic boundaries? How do we do so when many policy elites of today want to continue to reinforce the stark distinctions between labor and management — and, quite frankly, for some, to keep teachers compliant and their costs low?

Given teaching's long historical record — with policy makers dictating bureaucratic rules for teachers to follow and expecting teacher education to be done on the cheap with few qualms about lowering entry standards as a quick cure for classroom shortages — the creation of 600,000 teacherpreneurs by 2030 is a large hill to climb. In developing a set of *policy levers* as catalysts for such an improbable teaching reform framework, we looked to the evidence of how other professions emerged out of their darker days. We also considered fresh ideas about cultural change, including Malcolm Gladwell's description of how social epidemics can take hold quickly and unexpectedly, behaving in atypical and often counterintuitive ways.

For us, it begins with Gladwell's Law of the Few, where a limited number of talented and committed teachers can lead in taking an idea to scale — from small startup to widespread movement. With the power of the Internet and multimedia messaging, hyper-connected teachers, working closely with local and national advocacy organizations, begin to intensely market 21st-century teaching as the complex work it truly is. We also borrow ideas about "cognitive surplus" from Clay Shirky, who notes in his book of the same name that by 2009, individuals and small groups had invested more than 100 million volunteer hours in developing Wikipedia. Imagine the champions of teaching doing something similar. In ways reminiscent of how the federal government marketed cigarette smoking as bad for your health, new coalitions of educators and community leaders can

persistently point out the negative consequences of viewing teaching as simplistic work, thereby building the political will necessary to reallocate current tax dollars and justify new ones needed to fully establish a results-oriented, self-regulating profession.

The first wave of teacherpreneurs, aided by new technology and evidence they assemble, will help make the case to policy makers and the public alike for elevating experts from the classroom to solve problems ranging from how to ensure students can walk safely to their neighborhood schools, to designing virtual reality games for second-language learners, to advocating for "fourth way" solutions to the policy problems of funding education schools and rewarding effective teaching. Their growing visibility, thanks to the continuing evolution of such social media venues as YouTube, will make effective teaching more visible and understandable to policy makers and the public.

Teaching finally will secure the respect it deserves when teacher unions are transformed into professional guilds — focusing first and foremost on teaching and learning and expecting all members to meet performance standards. In our carefully considered future, teachers would earn differentiated membership into their guilds, based on the quality of their teaching and the degree to which they effectively share their knowledge with peers. As a result, the monotonous and divisive debates over the role of teachers will come to an end, and teacherpreneurs — still working in classrooms with the students they serve — will lead and sustain their colleagues, and an engaged public, in an era when teaching and learning are being constantly transformed.



"I can't play video games with you after school today. I have to help my father help me with my homework."

Copyright of Phi Delta Kappan is the property of Phi Delta Kappa International and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.