

where **teachers** are central to **improving schools**



## Reforming High Schools Must Start With Teachers

America's high schools are obsolete. By obsolete, I don't just mean that our high schools are broken, flawed, and underfunded—though a case could be made for every one of those points. By obsolete, I mean that our high schools—even when they're working exactly as designed—cannot teach our kids what they need to know today.

—Bill Gates

National estimates indicate that only one-third of students graduating from U.S. high schools are ready for college-level work and citizenship. The remaining two-thirds, who are primarily low-income or minority students, remain unprepared for higher education and the majority of careers.

Recognizing the urgency of this issue, researchers, policymakers, and philanthropic foundations, led by the Bill and Melinda Gates Foundation that has dedicated over \$1 billion to the cause, have created momentum to reinvent the American high school.

The Gates Foundation outlines the three essential elements of successful high schools as rigor, relevance, and relationships. To compete in the 21<sup>st</sup> century marketplace and offer equitable educational opportunities to all citizens, high schools must offer challenging curriculum to all students, create courses relevant to the lives and goals of today's students, and surround these students with adults who know and care about them.

While many high school reform efforts focus on creating smaller schools, the key ingredient of the goals outlined above is a stable cadre of high-quality teachers for every

The Center for Teaching Quality commends these efforts to ensure educational equity and academic success for all high school students. In order for such efforts to succeed, however, teaching quality needs to be at the forefront of high school reform.

high school. Rigorous courses require teachers with sophisticated knowledge of their field; relevance in the classroom requires teachers with the flexibility and creativity to teach that subject matter in different ways, and engendering productive relationships requires teachers committed to students' growth in and out of the classroom and who teach in the same school for an extended period of time.

A growing body of research has convinced policymakers and business leaders of what parents have always known: teachers and how they teach have more influence on student achievement than any other school-based factor. Although teaching quality has gained prominence in discussions of improving education generally, reformers need to call attention to what characterizes quality teaching in the specific context of redesigned high schools and how to ensure this quality teaching for all students.

### The Effective High School Teacher

Research from the National Academy of Education indicates that effective teachers in redesigned high schools will need knowledge of 1) subject matter 2) teaching practices and 3) learners in social context.<sup>1</sup> Because high schools are tradition-bound organizations, it is important that teachers be actively involved in the process of reform. As a result, effective teachers will also need: 4) awareness of high school change.

#### *Knowledge of Subject Matter*

Given the exploding knowledge base in different disciplinary fields (e.g., biology), effective high school teachers must possess a deep conceptual understanding of their subject matter. Moreover, because

small, redesigned high schools offer a more focused, integrated curriculum, good teachers must also be able to make interdisciplinary connections and guide their students in developing links among facts and ideas as well as problems and solutions. They must understand how to select the kinds of texts, resources, and learning opportunities appropriate for adolescent students. Finally, given current school reforms, good high school teachers must know a great deal about national and state student standards and how to make sense of them for instruction in their local context.

### *Knowledge of Teaching*

Effective high school teachers know how to make complex content accessible to students. They anticipate the obstacles students will encounter in solving subject-specific problems and are aware of common misunderstandings within a content area. Good teachers also must know how to use technology and other curricular resources to deepen students' understanding and inspire them to learn.

Redesigned high schools call for teachers to assess students more authentically. Effective high school teachers must design tasks and then grade students on how well they organize information, apply the right methodology, draw logical inferences, support opinion with facts, and communicate their knowledge effectively both orally and in writing. Good teachers also know how to use assessments to help students monitor their own learning and inform parents (and other family members) of their child's progress.

### *Knowledge of Learners in Social Context*

Effective high school teachers understand how students learn, and in particular, how adolescents view the world. For students to grow academically as well as socially, good teachers must know them well and their readiness for the tasks at hand. They need to know the background and culture of their students and understand how language or social issues outside of the classroom may affect their learning.

### *Knowledge of High School Change*

High schools are well-known for their resistance to change. This means that effective high school teacher leaders must be involved in creating and communicating the vision for redesign and then helping ensure school-wide commitment and organizing their colleagues to think and act differently. Good high school teachers know about different models of high school organization, and they understand the obstacles to change.

## Ensuring Quality Teachers for America's High Schools

Developing these characteristics in all high school teachers requires a strategic approach to preparing, recruiting, and retaining quality teachers for American high schools.

### *Preparation*

To provide quality teachers for redesigned high schools, teacher preparation programs need to ensure that their graduates know their content areas thoroughly. Policies should recognize that knowing content does not necessarily equate with a major or passing an exam. Through program approval, states should ensure that required courses are aligned with what teachers need to know to effectively teach high school students. Additionally, preparation programs must address strategies for teaching that subject matter and provide graduates with an understanding of how diverse students learn.

Given current teacher shortages, high-quality alternative certification programs are needed both to attract more young people to a career in teaching and to enable other professionals to enter the teaching profession. For those programs to be effective, they must provide candidates with quality instruction in subject matter, teaching methods, and classroom discipline techniques *before* these individuals enter the classroom. These teachers will also need a support network, mentoring, and close monitoring and evaluation to be successful. The success of these alternative routes to teaching is especially vital to high schools because they depend on these alternatively certified candidates more heavily than elementary or middle schools.

Good high school teachers know that learning to teach well is a process that continues throughout their careers. All new teachers need induction and mentoring programs that encourage them to learn from expert teachers. A mere 1 percent of beginning teachers nationally receive comprehensive induction. According to CTQ data from a statewide survey of South Carolina educators, high school teachers were significantly less likely than their elementary and middle school colleagues to report having time for discussing mentee's teaching or time for planning during the school day.

### *Recruitment*

Targeted recruitment policies are needed to place teachers with the appropriate knowledge and skills in every high school classroom, particularly in mathematics and science.

While financial incentives, such as loan forgiveness, bonuses, and performance pay, will play a critical role, non-monetary incentives, such as reduced teaching loads, smaller class sizes, and strong leadership, will be necessary as well.

In addition to attracting existing teachers to the schools that need them most, high school reform would benefit from efforts to recruit more individuals to the teaching profession. Targeted scholarship programs can help increase the number of college students selecting a career in education. High-needs schools in particular, which primarily teach low-income and minority students, will benefit from programs that specifically recruit members of the local community to pursue a career in teaching.

### Retention

To retain good high school teachers, redesigned high schools should draw on teacher feedback regarding what makes a school a successful place to work and learn. High-quality teachers do not stay in high schools with poor working conditions. Recent surveys on teacher working conditions in states such as North Carolina, South Carolina, Ohio, and Virginia indicate that high school teachers have more negative feelings about their working conditions than elementary and middle school teachers. These surveys show that teachers remain in schools where they have strong principals, time to collaborate with colleagues, and are empowered to take on leadership roles.

One of the areas of greatest concern for high school teachers is leadership. National studies have found that teachers frequently cite lack of administrative support as a reason for their departure. Teachers from high-minority, high-poverty schools are even more likely to report this as a reason for leaving. In addition to hiring quality principals, redesigned high schools can benefit from collaborative leadership, which favors shared decision-making and recognizes teachers' diverse expertise and their in-depth knowledge of the students they teach. Teachers can serve as instructional leaders, mentors to new teachers, and important advocates and enactors of school change.

## Policy Recommendations

- Create smaller schools as means of allowing teachers to better know each of their students and to create lower class size and student loads, which in turn provide teachers with more time for collaboration and professional development.
- Recruit talented individuals not only to teaching, but to teaching high school specifically. Doing so will require higher salaries and better working conditions that are more commensurate with other professional careers and also quality preparation to ensure that these individuals are equipped to succeed in the classroom.
- Transform high schools into centers of learning for students *and* teachers. Offer frequent, high quality professional development. Teachers should play a role in selecting the content of their own professional development that relates to their own unique needs.
- Empower teachers to be agents of high school reform. Listen to teacher feedback about what makes a successful school and entrust teachers with leadership positions as changes begin to take place.
- Fund efforts to focus more resources and collect significantly more data on teaching quality indicators in redesigned high schools.

### Note

1. These qualities are based on the synthesis of a range of large-scale quantitative research and more in-depth case studies on how humans learn, the effects of teacher education, and the teaching practices that lead to student learning. See the National Academy of Education.

*Teaching Quality Across the Nation: Best Practices & Policies* is a bi-monthly publication of The Center for Teaching Quality. For more information, send an e-mail to [Contact\\_BestTQ@teachingquality.org](mailto:Contact_BestTQ@teachingquality.org), or visit our website at <http://www.teachingquality.org>.

The Center for Teaching Quality, Inc.  
976 Martin Luther King Jr. Blvd., Suite 250 · Chapel Hill, N.C. 27514  
(919) 951-0200