The American Diploma Project (ADP) and partner organization staff spent nearly two years gathering empirical evidence to codify the knowledge and skills that all high school graduates actually need to do credit-bearing coursework at state colleges and universities or to embark successfully on career-track positions in high-growth, highly skilled "good" jobs.

Working with two- and four-year postsecondary English and mathematics faculty; with a wide array of humanities, sciences and social sciences faculty; and with front-line managers in those highgrowth, highly skilled occupations (within and beyond ADP partner states of Indiana, Kentucky, Massachusetts, Nevada and Texas), we identified the "must-have" competencies in English and mathematics for success in all of these arenas.

#### **Step One: Defining Workplace Expectations**

Commissioned by ADP, Educational Testing Service (ETS) researchers Anthony P. Carnevale and Donna M. Desrochers used data from the Bureau of Labor Statistics and the U.S. Department of Education's National Educational Longitudinal Survey (NELS) to determine which jobs are "good" jobs — ones that pay enough to support a family well above the poverty level, provide benefits and offer clear pathways for career advancement.

The researchers then identified which courses people in these jobs took in high school and what their grades were. Building on the study data, two panels of curricular experts helped ADP delineate the content that comprises those courses to develop a set of preliminary workplace expectations for English and mathematics.

# Step Two: Securing Input from Employers on Preliminary Workplace Expectations

ADP preliminary workplace expectations were circulated among actual front-line managers in a variety of industries such as health care, gaming, high-tech manufacturing, information technology, law, television, shipping and transportation, retail, and financial services.

The employers confirmed the importance of the content of the preliminary benchmarks. They also verified the ETS finding that a majority of the best jobs do in fact require some education beyond high school. ADP then refined the preliminary set of workplace expectations to reflect the feedback from those employer interviews, while defining preliminary postsecondary expectations as well.

# Step Three: Defining Postsecondary Expectations for Credit-Bearing Coursework

First, staff from The Education Trust assembled English and mathematics faculty members from K–12 systems and from two- and four-year colleges and universities in each of the ADP partner states (Indiana, Kentucky, Massachusetts, Nevada and Texas). The faculty members examined the content of partner state high school graduation tests; national college admissions and placement tests (SAT, ACT, COMPASS, Accuplacer); a sampling of postsecondary placement tests; and the GED to codify what the de facto standards are for students by evaluating the content of the various assessments they are asked to take.

Then, ADP examined the alignment between partner state high school standards for English and mathematics and their assessments. Next, ADP asked faculty members from two- and four-year colleges, representing a broad range of content areas, to define the English and mathematics content and skills necessary for success in freshman, credit-bearing courses and to identify gaps between the content and skills they identified and the state high school standards and assessments.

### Step Four: Synthesizing the Preliminary Workplace and Postsecondary Expectations

ADP took these two sets of preliminary expectations, one workplace and one postsecondary, and combined them into a draft set of ADP college and workplace readiness benchmarks. The new draft expectations were then circulated again among postsecondary faculty and employers for further assurance that this set of combined expectations represents the convergence of "college-ready" and "workplace-ready" skills.

### **Step Five: Convening Content Area Expert/Employer Panels**

postsecondary environments.

ADP convened panels of business representatives and content area experts to advise us as we revised the draft benchmarks. The panels considered, for example, which benchmarks would represent the best intersection of employer and postsecondary demands, thereby comprising the knowledge and skills that will best prepare all students for success in either arena.

Step Six: Gathering Tasks and Assignments from Employers and Postsecondary Faculty
Finally, ADP collected sample workplace tasks and postsecondary assignments from highperformance employers and postsecondary faculty. The benchmarks and sample tasks and
assignments should be considered together because they illustrate how the academic content
knowledge and skills that need to be learned in high school may be applied in a variety of