

Overview

Today's workforce and educational expectations have shifted rapidly around students. Automation, globalization, and related forces have led to structural change in the American economy, creating ripple effects for both the education and workforce sectors. Many viable pathways for economic opportunity have shifted to educated workers with higher skill levels and students are now challenged to become ready for careers that are newly emerging and in some cases, may not yet exist. Along with this change, the question about the meaning of high school has become more pronounced with educators, families, and policymakers alike examining what it is that students really need out of a high school education.

Today's world demands students and workers have more than basic skills and competencies in academic subjects to succeed. With at least two out of three jobs requiring students to have postsecondary education of some kind, a high school education is far more important now than in generations past. In addition to academic competency, all students need higher-order abilities, such as critical thinking and the ability to apply knowledge to solve complex problems, no matter the career field or educational path they choose. While not all jobs available to students will require a four-year degree, additional training such as obtaining a certificate or industry credential is often needed.

A high school diploma, formally called the New Mexico Diploma of Excellence, is offered in all high schools statewide. Students are eligible to earn a diploma upon successful completion of both **coursework** and **competency** requirements. Specific coursework requirements are defined in statute and students must also demonstrate competency in the five core content areas – mathematics, reading, writing, science, and social studies – to earn a New Mexico Diploma of Excellence.

The Role of Graduation Requirements

High school graduation requirements can set students up for either success or failure in college or the workforce after high school. In addition to preparing students for civic life, a high school education ideally ensures students are prepared for any chosen pathway after completing school: either postsecondary education or the workforce.

A [2018 audit and study](#) of nationwide high school graduation requirements by the Center for American Progress (CAP), an independent nonpartisan policy institute, found most state high school graduation requirements are so poorly designed they often trap students in a “preparation gap,” where they don't qualify for admission to public universities and are also inadequately prepared for other job and postsecondary prospects. CAP researchers found many graduation requirements fail to meet admission criteria for states' respective public university systems. Many requirements also leave crucial advising decisions up to students by not offering sufficient preparation or guidance counseling. The CAP study notes rigorous expectations for a high school diploma are a critical first step to prepare students for success, no matter if a student wishes to pursue admission to a university, study in a career and technical education (CTE) field, or directly enter into a career or the military. CAP reports these rigorous expectations must be matched with systems of support, excellent teachers, effective curricula and instructional materials, guidance in planning for goals after high school, and access to challenging coursework.

Research cited in the CAP study suggests a core 15-credit “college-ready curriculum” can be of high value to students, whether they intend to go to college or not. This includes four years of English; three years in math up to algebra II; three years of laboratory science, including biology and chemistry or physics; three years of social studies, including U.S. or world history; and two years of foreign language study in a single language.

New Mexico Graduation Requirements (Section 22-13-1.1 NMSA 1978)	Center for American Progress: Suggested Minimum 15 Academic Credits
English: 4 units	English: 4 academic years
Math: 4 units including algebra II or its equivalent	Math: 3 academic years, up to algebra II
Science: 3 units in science, including two courses with a lab component	Science: 3 academic years of laboratory science including biology and chemistry or physics
Social Studies: 3.5 units in social science including U.S. history, world history, government or economics, and New Mexico history	Social Studies: 3 academic years including U.S. or World History
Career Cluster, Workplace Readiness, or a Language Other than English: 1 unit	Foreign Language: 2 academic years of study of a single foreign language
Physical Education: 1 unit	
Electives: 7.5 units	
Note: Current statute also requires CTE courses, student service learning, and financial literacy to be offered as electives. Health education is also required before graduation but may be offered in middle or high school, as decided by local school districts.	

Source: NMPED; Center for American Progress

CAP notes there is evidence that even without a college credential, students taking the 15-credit course sequence have better life outcomes. Among its recommendations for states to address this “preparation gap,” CAP also advises that states:

- Ensure **clear alignment of high school graduation requirements and admission requirements** for the state’s public university system;
- Require **completion of the 15-credit college-ready coursework** required by most public university systems to receive a standard high school diploma;
- **Offer an additional “career-readiness” diploma** for students that choose not to attend a four-year university;
- Publish **disaggregated graduation rates** with information on student group and diploma type;
- Ensure all school districts have the **resources and educator workforce** to offer courses and preparation needed for students to meet the requirements for both standard and career readiness diplomas, especially in math, science, and foreign language; and
- **Develop and maintain systems to monitor school districts** on appropriate methods to collect and analyze graduation requirement completion.

A [2016 report](#) by the Center for Public Education (CPE), a nonprofit educational organization founded by the National School Boards Association, assessed the outcomes of high school graduates that do not go to college and found that for students to graduate college and career ready, high schools must ensure students complete a rigorous curriculum that includes math at least through algebra II, or its equivalent, and high-level lab sciences.

In addition to academic expectations, CPE also recommends students have access to modern CTE programs focused on building knowledge and skills in a specific labor market field and that guidance counselors play an essential role in communicating varied options to students. CPE also notes high-level math and science courses, as well as vocational courses, are not just for college goers. CPE writes “life does not always go to plan,” even for students intending to go on to college. Rigorous curriculum, combined with access to vocational courses, is important to give all students options after high school. For more information on CTE, see the “One Pathway: Career and Technical Education” section below.

Pathways to “Good Jobs”

The Georgetown Center on Education and the Workforce, an independent, nonprofit research and policy institute, wrote in a [2018 report](#) there are three main pathways in today’s workforce to “good jobs” – which the center defined as a job paying a minimum of \$35 thousand annually for workers between the ages of 25 and 44 and at least \$45 thousand annually for workers between the ages of 45 and 64. The three

pathways are defined by education and skills and include: the high school pathway, the middle-skills pathway, and the bachelor’s degree (BA) pathway.

While each pathway can result in a viable job opportunity, there are notable differences for students depending on the path they take. The Georgetown Center on Education and the Workforce reports the high school pathway accounts for 20 percent of good jobs, the middle-skills pathway accounts for 24 percent, and the bachelor’s degree pathway accounts for 56 percent.

Pathway Type	Description	Example Field and Occupations in Pathway
High school pathway	The Georgetown Center on Education and the Workforce reports about 13 million jobs still exist for workers with only a high school diploma. These openings account for about 20 percent of overall “good jobs.” Once the majority pathway for many workers, jobs available to those with a high school diploma used to primarily be manufacturing related. Although manufacturing declines have impacted such job availability, the high school pathway still includes many workers who start in lower-paying roles and work up to management positions.	Fields such as construction, manufacturing, retail, food services, and office support. It also includes workers who are truck drivers, carpenters, drillers, oil and gas equipment operators, industrial machinery operators, and other such workers.
Middle-skills pathway	Loss of manufacturing jobs has impacted the middle-skills pathway, but this route has benefited from a new set of jobs that have appeared in recent years. The middle-skills pathway, accounting for 24 percent of all “good jobs,” now includes roles that are traditionally middle-skills jobs as well as new segment of the economy. Note: The Georgetown Center on Education and the Workforce reports all of the growth of net new good jobs outside of those available to workers with a bachelor’s degree has been in middle-skill jobs. These jobs are growing the fastest among workers with associate’s degrees, in particular. In addition, education and training that supports the middle-skills pathway has been particularly innovative and responsive to changes in labor market demand. Educational options to prepare students for middle-skills jobs are more flexible and include apprenticeships, on-the-job training, career and technical education, certificates, certifications, and associate’s degrees, among other options.	Middle-skills roles that have traditionally been available include firefighters, law enforcement officers, electricians, mechanics, technicians, highway maintenance workers, and others. In addition to these traditional middle-skill roles, it also includes emerging jobs like healthcare technologists and technicians, computer control programmers and operators, surveying and mapping technicians, and information and record clerks.
Bachelor degree pathway	The bachelor’s degree pathway accounts for 56 percent of all “good jobs.” This is in large part because of the greater demand for workers with at least a four-year college education. Nearly three out of four jobs that are available to workers with bachelor’s degrees are “good jobs.” Note: This pathway includes a bachelor’s degree as a minimum requirement and may reflect additional occupations that require education beyond a four-year degree.	The bachelor degree pathway includes professional and technical roles such as doctors, lawyers, engineers, accountants, computer programmers, journalists, architects, managers, and other roles.

Source: Georgetown Center on Education and the Workforce

One Pathway: Career and Technical Education

Research from *No Time to Lose*, a 2016 study published by the National Conference of State Legislatures, shows CTE is emerging as a hallmark of high-performing education systems globally. In the studied countries, CTE is well-funded, academically challenging, and aligned with in-demand workforce needs to boost local and national economies and offer attractive careers to a broader constituency. It is also viewed as a valuable approach to education that results in skills that are immediately valuable after secondary school. CTE offered internationally is widely available to a range of students – some who may pursue jobs directly from CTE programs and others who may use CTE as a path to additional education.

The Johns Hopkins University Institute for Education Policy reports similar findings, noting international CTE programs are far more robust than those in the United States, often linking educational systems to larger economic goals.

In New Mexico, many school districts and charter schools offer CTE courses and programs. However, these programs have historically been disconnected from labor market needs, vary greatly by region and school district, and often lack programmatic elements that make CTE programs effective. The Perkins Collaborative Research Network, a division of the U.S. Department of Education, [reports](#) 65 thousand high school students and nearly 50 thousand college students took CTE courses in New Mexico during the 2019-2020 school year. Historically, these programs have been disconnected from labor market needs and vary by region and school district, often lacking programmatic elements that make CTE programs effective.

To be successful, CTE programs must be academically rigorous and include pathways to postsecondary training. CTE offerings in isolation or without a clear connection to the job market often fail. The National Center for College and Career (ConnectED), an organization that partners with schools and communities to offer Linked Learning, an approach to education reform that focuses on career pathways embedded into student instruction, notes four crucial elements that include CTE as part of broader system:

- **Rigorous Academics.** CTE is offered as a complement to traditional academic courses instead of as a replacement.
- **Real-World Technical Skills.** CTE programs are designed to equip students with knowledge and skills that have clear connections to the workforce and labor market.
- **Work-Based Learning.** Work-based learning is offered in series by school districts and charter schools, beginning with mentorship and job shadowing before eventually becoming internships and apprenticeships.
- **Personalized Student Supports.** Students are offered academic counseling, supplemental instruction in weak content areas, and college and career guidance.

New Mexico funding for CTE is the highest it has been in over a decade between both state and federal investments.

Funding CTE: The primary source of federal funding for CTE is the Carl D. Perkins Career and Technical Act (widely known as **Perkins V**). Perkins V is a federal education program that invests in secondary and postsecondary CTE programs nationwide. The U.S. Department of Education reports New Mexico is [estimated](#) to receive \$9.7 million in Perkins funding in FY21. New Mexico [received](#) just over \$9.3 million in Perkins funding in FY20. PED oversees all Perkins funding in New Mexico.

At the state level, New Mexico offers the **Next Gen CTE Pilot Program**. The General Appropriation Act of 2021 (GAA) provided a \$3 million recurring general fund appropriation to the CTE fund for use in FY22. The fund received \$4.5 million for use in FY21. The FY22 appropriation is for PED to support high-quality CTE programs pursuant to the CTE pilot project legislation. During the 2019 legislative session, Laws 2019, Chapter 61 (House Bill 91) and Laws 2019, Chapter 2 (House Bill 44), enacted Sections 22-1-12 and 22-1-13 NMSA 1978, which established a CTE pilot project and created a CTE fund. The bill authorizes PED to make grants to school districts and charter schools to establish CTE programs or provide professional development and training to CTE teachers. HB91 included key criteria for effective CTE programs such as rigorous academics, relevant technical instruction, and pathways to postsecondary education. It does not include opportunities for work-based learning or student supports.

Conclusion

As policymakers consider what it is that high school students need to know, there are key insights to keep in mind. Research consistently notes guidance and advising are crucial for high school students. Additionally, in today's rapidly shifting workforce, students need to be set up for success in a range of pathways. Rigorous coursework, combined with hands-on skill development, such as that offered by modern CTE programs, work-based learning, and other similar options, is pivotal for all students.