the road to readiness
Equitable Access to Career Pathways and College Transition Supports in Northern New Mexico
acknowledgements
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introduction

Ensuring students have the opportunities they need to be college and career ready as they exit secondary schooling is more important than ever given present and future job market demands, the critical need for economic mobility, and our increasingly global context. There is clear consensus across the United States that, upon completion of a high school education, students need to be prepared to enter and complete college or specialized training programs to gain the knowledge and skills needed to succeed in an increasingly competitive global workforce. The National Skills Coalition projects that 80% of all job openings between 2014 and 2024 in the United States will be middle- and high-skill jobs requiring a workforce certification, college certificate, or degree. The United States is losing its global footing on the stage of world-class education systems necessary to prepare people for the 21st century’s knowledge-based economy. This adds to the urgency for states like New Mexico to systematically respond to the need for robust college and career preparation programs.

In order for students to achieve equitable outcomes, they need access to differential and comprehensive resources and structures that remove barriers and support a successful transition to college and career pathways that then lead to high-quality jobs and careers. For students of color, English language learners (ELLs), students from tribal nations, low-income and rural communities, students with disabilities, and other students often further from access to opportunities, these resources and structures are even more critical. Equitable approaches to college and career access must strive to create the essential environments and pathways that support students in developing the knowledge, skills, and identities that will enable them to meet the challenges of work, civic participation, and lifelong learning in the 21st century.

The Los Alamos National Laboratory Foundation (LANLF) has a mission to support public education, learning, and community development in a seven-county region (i.e., Los Alamos, Mora, Rio Arriba, San Miguel, Sandoval, Santa Fe, and Taos counties). LANLF is committed to supporting the improvement of learning opportunities and support structures for students as they transition from high school to college, career, and community pathways.

In 2019 and 2020, LANLF worked with education researchers to better understand student access to college and career supports and career pathways in high schools in the seven-county region. This report is the culmination of interviews conducted with principals, counselors, and administrators at 25 high schools. Participating schools varied in size and type, including seven mid/high schools, seven charter schools, one tribally controlled school, one early college high school, and one International Baccalaureate (IB) school. Schools were selected purposefully to ensure that we gathered data from different types, locations, and sizes in the Northern New Mexico region. The 25 schools in our study served a total of 10,378 students during the 2019–2020 school year—approximately 9% of the total statewide high school population. Participating schools had a wide range of graduation and proficiency rates, with many schools outperforming the statewide graduation rate and demonstrating a higher percentage of proficiency than students statewide.

LANL Foundation contracted a new researcher in fall 2020 to conduct follow-up interviews to understand the immediate impact of COVID-19 on college and career supports. Nine schools participated in the follow-up inquiry focused on changes in context and needs for college and career supports and career pathways. The data were closely examined through an iterative thematic analysis to identify aggregate findings and to inform recommendations. Findings and recommendations from the participating schools are offered as a means to improve college and career supports and career pathways in Northern New Mexico.
study methodology

The research team developed and shared with participating schools a survey to identify contextual information about students’ access to college and career supports and career pathways at secondary schools. Using a questionnaire format to conduct interviews, the research team gathered information about existing supports and needs, then combined the information with publicly available school data. The questionnaire included questions regarding course offerings (e.g., dual credit, pre-advanced placement (AP), honors and advanced placement courses, etc.), career pathway options, administrative staff supports (e.g., college and career counselors, vice principals, and deans of students, etc.), and college transition and supports (e.g., completion of entrance exams, FAFSA applications, etc.). The study design purposefully included different types of schools (i.e., charter, tribal, and public), different sizes, and rural and urban schools. During the summer of 2020, one additional school in the region accepted the invitation to participate in the project and submitted their survey responses to LANLF staff for inclusion in this study.
Today’s high schools are evolving from the old assumptions that students should graduate prepared for either college or a career. The old model reflected an economic landscape in which a number of viable career pathways were accessible to adults with only a high school education. This model perpetuated a form of structural racism and classism in which low-income and students of color were disproportionately enrolled in vocational education in high school, while advanced academic preparation was often reserved for wealthier, white peers identified as “college-bound.”

Given 21st century shifts in technology, the national economy, and global markets, most viable careers now require at least some postsecondary training. Thus, today’s high school students need to graduate prepared for both employment and further education, whether it be a workforce training program, community college, or baccalaureate program. These shifts have prompted increasingly urgent definitions and actions about how to ensure students—especially students who have been underserved in our education system—have equitable access to the programs they need to be both “college and career ready.”

What is College and Career Readiness?

College and career readiness speaks to the standards and requirements a nation or a state has to describe students’ readiness to enter college and careers. The Common Core State Standards (CCSS) provide one definition of college and career readiness that has been adopted by most states in the U.S. The CCSS articulates comprehensive learning goals in English language arts and math, kindergarten through 12th grade, that prepare students for academic and career success beyond high school. New Mexico adopted CCSS in 2010.

New Mexico’s definition for college and career readiness can be further understood through the state’s graduation requirements, which are composed primarily of assessments and coursework in core academics (i.e., math, reading and writing, science, and social studies), and including at least one honors, AP, dual credit, or distance learning course. These are supplemented by one course each in physical education, health, and a “career cluster course, workplace readiness course, or a course in a language other than English.”

Around the country, state agencies, schools, districts, industry, and community groups continue to engage stakeholders to develop graduate profiles that reflect a broader definition of student success than state standards and graduation requirements, including skills that colleges and 21st century employers are looking for in an increasingly global and knowledge-based economy.

In New Mexico, Santa Fe Public Schools’ Attributes of a Graduate, Mission: Graduate’s Central New Mexico Graduate Profile, and Santa Fe Indian School’s Ideal Graduate offer three examples that include a variety of competencies beyond academic proficiency in their definitions of readiness. Some examples of competencies within these profiles include creative problem-solving, using the analysis of complex problems; critical, confident, independent, and inter-dependent, lifelong learning; working productively with all types of people and making good choices; compassion, empathy, respect, and cultural sensitivity; knowing and respecting one’s self, respecting others; and being resourceful.

How a school, district, or state defines college and career readiness can be important for orienting students, teachers, and families toward crafting the academic, social, and career opportunities that help students develop the knowledge, skills, identities, and beliefs that inform how they will participate in society beyond high school.
College and Career Support for High School Students

A significant body of research also makes it clear that simply equipping students with academic content knowledge, even when supplemented with 21st century skills, is not sufficient for a successful transition into a career following high school and the postsecondary education and training now required for most careers. In addition to access to rigorous academics, students need help making decisions about next steps, building confidence in workplace skills and professional environments, developing networks of valuable social capital, navigating systems, and gaining access to opportunities. Schools, colleges, and industries need to help by collaborating to align resources and structures to ensure equitable access to college and career supports. Many of these supports are articulated at the federal level and are described in Table 1.

The college and career supports outlined in Table 1 are most effective when implemented in coordination with one another and not as stand-alone initiatives. This is exemplified in the Linked Learning approach that has demonstrated better outcomes when CTE courses are provided along with work-based learning opportunities, comprehensive support services, and rigorous academics aligned to higher education admission requirements. It has been argued that, despite good intentions, the high school experience in practice tends to either push students academically or provide engaging, real-world applications of learning. In the 21st century, we need both college and career readiness strategies with strong career pathways to resolve this dichotomy, thus integrating academic preparation with career development to maximize both rigor and relevance.

CAREER AND TECHNICAL EDUCATION (CTE)

In 2006, the reauthorization of the federal Carl D. Perkins Act renamed what had previously been called “vocational education” as “Career and Technical Education” (CTE) and emphasized the importance of integrating academic rigor with career-focused training, recognizing that most career paths now require education beyond high school. A 2018 reauthorization of the Act, commonly referred to as Perkins V, called for CTE programs to focus on industry sectors with high job growth.

CTE is an umbrella term for courses and experiences with a career focus and can include combinations of diverse components: technical training classes, soft skill programs, work-based learning, integration with academic curriculum, career counseling, and more. Some students graduate having taken a CTE course or two. Others, often called “CTE concentrators” take multiple courses, ideally as part of a structured career pathway. A number of studies have shown positive outcomes for students who take CTE courses. The impact is even greater for CTE concentrators, who are more than 20 percentage points more likely to graduate from high school and are more likely to enroll in college than their non-concentrator peers.

Career pathways provide students with a sequence of courses, learning experiences, and supports that advance over time, preparing them for postsecondary training and ultimately resulting in a certificate or degree in a viable career. Career pathway models include well-planned CTE programs, the Linked Learning approach, career academies, and early college high schools. There is a growing body of evidence that career pathway models are having positive impacts on students’ college and career outcomes.

COLLEGE PREPARATORY COURSES AND PROGRAMS

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New Mexico Context

Northern New Mexico’s stunning landscape is home to a rich fabric of Native American pueblos, tribes and nations, traditional Hispano villages, and towns and municipalities populated with a mix of Indigenous people, multi-generational New Mexicans, and immigrants. According to the 2019 U.S. Census Bureau, nearly 68% of the population in the seven-county region are people of color (see TABLE 2).

<table>
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<td>NUMBER AND PERCENTAGE OF PEOPLE OF COLOR IN THE SEVEN-COUNTY REGION IN 2019</td>
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<tr>
<td>County</td>
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<tr>
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<tr>
<td>Rio Arriba</td>
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<td>Santa Fe</td>
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<td>Total Population</td>
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% of People of Color | 67.7% | 1.7% | 9.2% | 1.7% | 0.2% | 2.5% | 52.4% |

Source: U.S. Census Bureau QuickFacts based on population estimates, July 1, 2019.

Northern New Mexico is also the home of the Los Alamos National Laboratory, the birthplace of the atomic bomb, key to U.S. national security, and home to leading technology and innovation. The predominantly rural region has a high concentration of Ph.D.s and leading world scientists, and is rich in agriculture, cultural leaders, and community stewardship. Yet, when compared to national norms, Northern New Mexico lags in almost every social indicator of healthy people and communities (i.e., economic well-being, education, and health). It is also a poor state, with more than one in four children living below the federal poverty level.

These student groups face a well-documented achievement and opportunity gap, which some have called a “debt” owed by an education system that has disenfranchised them for generations. In New Mexico, it’s crucial that we pay attention to local examples and national research that demonstrate how greater support and access to pathways for college and career success works to address this “debt,” particularly among low-income students, aspiring first-generation college-goers, and students of color.

In 2018, the New Mexico First Judicial District Court ruled on Martinez and Yazzie v. State of New Mexico, declaring that the State “violated the rights of at-risk students by failing to provide them with a uniform statewide system of free public schools sufficient for their education” and further detailing (among other elements) that the State “failed to provide at-risk students with programs and services necessary to make them college or career ready.” As part of the work to address the court’s ruling in the case, the New Mexico Legislature determined that, as one of the key elements of a sufficient education, students must be provided with a rigorous and relevant high school curriculum that prepares them to succeed in college and the workplace. The court’s landmark ruling amplifies the critical role college and career supports play in a sufficient public education and the urgency for the state to meet its constitutional obligations to the children of New Mexico.

While there is significant room for improvement, many building blocks are already in place in school practice as well as in state and tribal policy that will serve to strengthen a system of college and career support and access for New Mexico’s students. First, the Next Step Plan is New Mexico’s version of an individualized learning plan (ILP), which students are to update annually in grades 8 through 12. Schools throughout the state, including 19 early college high schools, offer a variety of college preparatory programs, dual credit, and advanced course options, although analysis suggests racial and ethnic disparities continue in terms of access to advanced placement courses in particular.

background
In addition, CTE courses are offered by high schools around the state and the New Mexico Public Education Department (PED) is encouraging growth through a seven-year Next Gen CTE Pilot grant supporting the implementation of new CTE programs of study. In the 2019 legislative session, the State Legislature enacted bills to support CTE professional development focused on integrating career education with academic instruction. However, it is still common for students to take stand-alone courses instead of a structured sequence of courses aligned with a postsecondary career pathway, leading the Learning Policy Institute (LPI) to name the following ambitious policy goal in a 2019 memo to the Legislative Education Study Committee:

Make career and technical education an integral part of secondary and post-secondary education in New Mexico by creating a system of college and career pathways that integrate CTE and core academic curriculum, combine classroom and work-based learning, and align secondary and postsecondary programs to prepare all students for postsecondary education and career success.

By systematically building on what schools have in place, addressing disparities in access to opportunities, and expanding partnerships between high schools, colleges, and industries, New Mexico can help address its debt to our youth.
School administrators who participated in the initial survey and follow-up interviews shared their perspectives and insights about the state of college and career supports in Northern New Mexico. A thematic analysis of the survey and interviews elevated five essential elements of the schools’ college and career support systems as outlined below in FIGURE 1: course and program availability; college and career resources; access to counselors; college and career supports in remote learning environments, and partnerships for success. The findings that follow present bright spots and challenges in these five areas as described by Northern New Mexico school leaders in their efforts to prepare students for college and career in the 21st century.

**Course and Program Availability**

Study participants provided information about the availability of honors, pre-AP, AP, and dual credit courses, and career pathways (which referred to both individual CTE courses and a set that are part of an articulated pathway). While New Mexico high school graduation requirements include taking at least one honors, AP, dual credit, or distance learning course, the responses highlighted the disparate options students have available to them in the seven-county region.

Our study found that students need access to additional academic preparation for college and their eventual career. Without some of the prerequisite math and reading skills, students experience barriers to accessing advanced courses such as honors, pre-AP, and AP and placement into college-level dual credit courses that contribute to a postsecondary certificate or degree. Advanced placement courses provide opportunities for students to engage with rigorous academic content that prepares them for postsecondary success. However, 40% of the schools in this study do not offer honors, pre-AP, or AP courses. In 81% of the 15 schools that do offer AP courses, fewer than 30% of students take those courses (see FIGURE 2 on page 18). Furthermore, in 73% of the schools that offer AP courses, fewer than 31% of students pass the AP test with a qualification to receive college credit, i.e., a score of 3 or better (see FIGURE 3 on page 18). This is well below the national average of approximately 60% and reflects the statewide trend for AP course participation and passing.
research findings

The 2019 Next Gen CTE Pilot further encourages the use of dual credit to support college and career preparation in high schools. Nearly all of the schools involved in this study had students participating in dual credit. While we found a very high dual credit participation rate, there was concern from school leaders that the course options were not aligned to a career pathway and ultimately not contributing toward a credential or degree.

Participants pointed to students' low reading and math proficiency rates and low scores on placement exams as a reflection of their under-preparedness for advanced courses. One administrator spoke about how there are not enough students performing at or above proficiency to justify offering high-level academic courses at the school, so high-performing students leverage dual credit options to advance their studies. The administrator described how the school valedictorian and salutatorian were enrolled in dual credit courses as alternative options and both students were struggling with the rigor of college-level coursework. Lack of access to rich academic preparation, starting in kindergarten, and rigorous course offerings perpetually limit our students' opportunities in high school.

College and Career Resources in Northern New Mexico
College and career readiness is not only about the academic and career opportunities students have access to, but also about having access to personalized supports to help navigate and plan for next steps, especially at key transition points, such as entering or graduating from high school. In order to truly promote racial equity, organizations like the Race Matters Institute recommend a “targeted universalism” approach, which requires “applying differential resources to unequal needs” and “removing barriers to dis-similarly situated individuals, families and communities.” Our study found that college and career supports, such as access to career counseling and courses in Northern New Mexico schools were largely dependent on external funding, which is often limited and inconsistent, to provide CTE courses and college transition supports, as can be seen in Figure 4.

Three of the schools offered career pathways without supplemental grant funding, while several other schools noted that CTE courses and career pathway options were not offered following a recent grant expiration. There was a particular focus on GEAR UP or Gaining Early Awareness and Readiness of Undergraduate Programs, a discretionary federal grant program that provides schools with grants for up to seven years to increase the number of low-income students that obtain a secondary school diploma and who are prepared to succeed in postsecondary education. One of the New Mexico Higher Education Department’s goals for GEAR UP is to “foster systemic change in GEAR UP schools that will outlast the grant funding.” Yet, as GEAR UP grants ended in schools, many schools were unable to sustain the supports. Several participants pointed to the Advancement Via Individual Determination (AVID) program as an example of important programs supporting college transitions that could no longer be funded after GEAR UP grants ended. Nine of the 25 schools interviewed received 26 supplemental grants from various sources in 2019 (see Table 4), while the remaining 16 schools did not receive supplemental support for college and career programming.

Perkins V and Next Gen CTE Grants have been the most common source of funding for CTE courses and career pathways programming in our state; however, our study found that despite the need, most schools in our study reported that they did not apply for, or applied and did not receive, Perkins V or Next Gen for the 2020 school year. Some schools stated that the low...
funding amounts and high reporting compliance for the Perkins V grants were burdensome, particularly for smaller and rural schools. In addition, the schools described the funding as “too limiting,” in part, because labor market information (LMI)—which guides the funding—reflects regional needs, rather than local community needs, for example: trade skills in welding, plumbing, electrical, mechanics, and business and arts industry sectors. The regional job market opportunities were largely reflective of more urban centers which are disconnected from students’ lived experiences. As one school leader stated, approximately 90% of the juniors and seniors at their school had never been to Albuquerque. Opportunities to explore more urban environments in the state were even more limited in the time of COVID-19 restrictions.

There are other challenges that need to be addressed to ensure equitable access to funding in our region. New Mexico’s statute creating the Next Gen CTE Pilot does not allow tribally controlled schools to apply for, or receive, Next Gen CTE funding. Furthermore, secondary schools funded by the federal Bureau of Indian Education (BIE) currently do not receive Perkins V funding that flows through the state of New Mexico even though the federal act requires the state to treat such schools as if they were a local educational agency for the purpose of receiving such funding. Instead, tribal secondary and postsecondary schools must compete for a very limited pool of Perkins V funding awarded to only a few dozen tribal grantees annually across the country.

Despite funding challenges, schools in this study were eager to offer additional college and career supports for students, particularly career pathways and expanded dual credit offerings. One school leveraged grant and district funding sources to provide multiple career pathways for students. The school funds a health care career pathway, which was aligned with the regional jobs data, via Perkins V funding and allocated school budget dollars to other pathways that were not on the priority list for the region (e.g., business and arts). Three other schools in the study were able to offer career pathways without supplemental grant funding. One school in the study, in particular, built a successful early college model via GEAR UP grant funding. The model accelerated learning for students and, as a result, the district absorbed the cost of the program once the GEAR UP grant ended. While an example of how effective programs can be seeded by grant funding, and then sustained by internal school or district funding, this case was an anomaly.

Access to Counselors for College and Career Support
Our study found that most high schools lacked sufficient counselors to provide differentiated and comprehensive college and career supports for all students. Counselors are key personnel for connecting students with college and career programming, working with students to develop true Next Step Plans (or a similar success plan for tribal and other BIE-funded schools), advising students on course selection and enrollment, assisting students with preparation and registration for entrance and placement exams (e.g., SAT, ACT, WorkKeys, Accuplacer, etc.), assisting parents and guardians with FAFSA completion, and communicating scholarship deadlines, internship opportunities, and other college and career support opportunities. It was common for college and career counselors to be shared across a district or to have the college and career support role added to the already full workloads of other counselors and school staff.

Of the 25 schools that participated in this project, 52% had one, a part-time, or no counselors available for their students (see FIGURE 5). The average counselor to student ratio in our study was 1:195, with the most extreme scenarios being a part-time counselor for every 322 students. Without adequate counselors, schools lack the capacity to ensure college and career support for all students. For example, our study found that a quarter of the schools reported that fewer than 50% of the graduating students completed a FAFSA. Additionally, schools indicated that valuable tools like Next Step Plans have become a compliance document rather than a tool that truly supports planning for college and career.

These findings from our study reflect how the limited access to counselors—and almost no access to college and career counselors—impacts the availability of strong individualized support for college and career preparation.

Access to College and Career Programming in a Remote Learning Environment
Our study found that—particularly since the onset of the COVID-19 pandemic—access to broadband and internet has become critical for students to have access to meaningful college and career supports. The state public health order issued in March 2020 aimed to slow the spread of the COVID-19 virus in New Mexico. In compliance with the health order, school facilities closed in-person teaching and learning for a majority of students. Schools made shifts to remote learning formats, making it imperative that students have adequate broadband, internet, and computer hardware to access course material, receive timely communications from school officials, and demonstrate attendance and engagement. Unfortunately, sufficient and accessible broadband does not exist in many Northern New Mexico communities. According to Broadband Now, the

<table>
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<tr>
<th>Percentage of Schools with Counselors (N=25)</th>
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<tbody>
<tr>
<td>5 counselors</td>
</tr>
<tr>
<td>4 counselors</td>
</tr>
<tr>
<td>3 counselors</td>
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<tr>
<td>2 counselors</td>
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<td>1 counselor</td>
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<td>0 counselors</td>
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FIGURE 5
state of New Mexico ranks 49th in broadband access. Broadband coverage in the seven counties that are part of this study range from 59.4% in San Miguel County to 99.5% in Los Alamos County, with the majority of counties having below 70% coverage. 48

Most schools in the follow-up interviews were managing multiple responses to the pandemic with municipal and tribal restrictions layered onto the state public health order. Schools that serve students living on pueblos and other tribal lands with limited to no broadband access experienced compounding challenges ensuring students receive quality instruction. Free public Wi-Fi and hotspots were not an effective solution for communities without broadband, particularly where stay-at-home orders and extended curfews prevented students from being able to access remote learning opportunities from their schools.

Our follow-up interviews also revealed that even in communities where there was adequate broadband, individual internet services and rate plans were cost prohibitive for most families. Essentially, all of the tools and equipment were in place, yet families could not afford to connect. To address this, communities provided free Wi-Fi access in public spaces and provided students with hotspots. Administrators explained that these were still insufficient for the bandwidth needed to deliver quality education and it was heartbreaking to see students forced to learn in vehicles, on sidewalks, and in other outdoor public spaces. One principal said that he is personally paying for students’ home internet bills so they can continue their studies, at least through the fall semester.

Participants in the follow-up interviews indicated that schools have made the pivot to remote learning; however, the availability of CTE coursework has been impacted by the limitations of the broadband capacity that do not allow for reliable video streaming. Prior to the pandemic, schools were able to offer CTE courses that required lab components, providing interactive, hands-on, and work-based learning experiences. Based on the follow-up interviews, CTE courses that required a lab component were not being offered in fall 2020. Schools are hopeful that the lab courses will be back on the books in 2021.

Where sufficient internet access existed, some students experienced easier access to dual credit courses as higher education institutions made a similar pivot to online learning. The increase of online postsecondary course offerings expanded access to dual credit for some rural schools that previously had transportation and scheduling barriers for students wishing to participate in dual credit classes. Additionally, one school that had an established 1:1 technology program and remote learning opportunities prior to the pandemic felt more prepared to pivot to full remote teaching. Students already had the hardware and software orientation for fully remote learning and teachers were already working toward providing remote content delivery. The pause and pivot allowed for a focus on improving practice and creating meaningful engagement with students and planning.

During the pandemic, schools have been working to deliver high-quality remote college and career preparation, sometimes in an environment without the broadband necessary to reach all students. Connecting students to colleges is another important aspect to support students to access opportunities beyond high school. Virtual college visits and tours have become commonplace during the pandemic; however, schools reported low student engagement in such activities. While school leaders said the virtual visits and tours still allow for engagement with colleges and they have seen more out-of-state colleges hosting virtual visits, the virtual conversations lack the personal interactions that students and families seek. We found that schools were still learning new ways to inform students about virtual college tours via email, rather than word-of-mouth and flyer communications as they have done in the past. As the pandemic continues, schools have expanded email communications, personal phone calls, and home visits to reach students and keep them engaged.

Partnerships for Success

While most study participants expressed a need to have more intentional and long-term industry partners, it is unclear how many schools, particularly in rural and remote areas, would have the capacity to cultivate, develop, and nurture robust industry partnerships. Some schools have removed some CTE courses and career pathways due to the lack of an industry partner, CTE teachers, or interest from students. One school leader shared that the school lost a key industry partner and local instructor, with the partner opting—because of the pandemic—to focus on health, family, and main sources of employment. As a result, the school had to stop providing a very successful career pathway. Interview comments pointed to how limited economic activity in rural communities impacts the availability of mentors and industry partners available to motivate students to aspire to a career that meets the needs of their local communities. In addition, the officials from schools in very rural communities indicated that they do not see offering career pathways as a viable option because of the low student population.

Schools highlighted the need for more formal relationships with businesses in
the form of a memorandum of understanding and for a less restrictive CTE licensure process that can facilitate deeper relationships with business partners through course instruction. Often, there was little evidence of school-industry partnerships beyond personal relationships with local business and community volunteers.

The COVID-19 pandemic has further reduced already limited work-based learning opportunities in the study area, experiences that are a cornerstone of high-quality career pathways. Apprenticeships and internships often provide the structure for such a learning experience and give students access to industry employers. With new unemployment claims at an all-time high due to the pandemic and no clear end in sight, school administrators expressed fears about students accessing work-based learning and how they will face the prospective job market after high school. One participant described how since the pandemic, internships halted because area companies and employers could not provide student learning opportunities in such an unstable business environment. As an alternative, the school encouraged volunteering at local food banks and other non-profit, social service organizations as internship and work-based learning options. Additionally, a number of participating schools stated that many of their students who would normally be doing internships and taking dual credit options to continue on their career pathways have opted not to participate in anything beyond what is required for graduation in order to take up low-wage, essential jobs to supplement the family household income or to provide learning support and care for younger siblings at home during the pandemic.

One bright spot is Future Focused Education (FFE), an organization based in Albuquerque that has developed the X3 Internship Program to provide work-based experiences to underrepresented students. The program leverages strong industry and employer partnerships to provide paid internships with local employers. Through the pandemic, FFE worked with employers to strengthen and expand offerings through virtual internships. The paid internships are credited with keeping kids in school and engaged during the COVID-19 pandemic. Successful results are reflected in an increase in student participation and completion, positive student experiences and employer reviews, and post-graduation employment. This year, FFE began working with two school districts in our seven-county study region.
Findings of this study point to several short-term and long-term opportunities for improving access to college and career supports in Northern New Mexico.

RECOMMENDATION 1: Strengthen College and Career Readiness Programming

It is clear from the findings that—more so than honors and advanced placement—dual credit is the vehicle of choice in Northern New Mexico to prepare students for college and their eventual careers. Students not only are exposed to college-level faculty and coursework, but the structure allows schools to accelerate learning opportunities to bridge students into life beyond high school.

Short-Term Opportunities
- Provide professional development to all high school administration, counselors, and teachers to establish a deeper understanding of how to integrate critical components of college and career preparation across the curriculum (e.g., effectively using Next Step Plans, leveraging dual credit, building course sequences, team teaching to connect CTE and academic courses, deepening personal supports, etc.).
- Create a continuum of comprehensive personal supports by cross-training high school counselors and college academic advisors to smooth out student high school-to-college transitions and credit attainment.
- Permit districts and BIE-funded high schools to establish a plan for small group rotations of in-person instruction at high school sites that allow students to meet work-based learning curriculum objectives, while still adhering to public health directives that minimize the spread of COVID-19. PED could provide guidance and support to interested districts. A similar approach could be considered at BIE-funded high schools, after consultation with tribal governments and with support from the BIE.

Long-Term Opportunities
- Systematically increase all students’ access to dual credit courses by increasing the number of teachers certified to deliver courses on high school campuses, supporting better collaboration among secondary and postsecondary schools, and expanding the use of effective remote learning platforms. This is particularly important for schools in tribal and rural communities that currently require transportation support for students to access courses at higher education institutions.
- Ensure that all students have comprehensive and personalized support for planning and transitioning to college and careers by providing each high school with a complete system of staff roles supported by the necessary funding and training. This should include sufficient college and career counseling staff and CTE coordinators and instructors to address the unique needs of each school as a result of its size, student demographics, and other factors. Providing schools with a complete administrative and staff structure will:
  - improve the use of academic planning tools such as Next Step Plans and career interest inventories;
  - increase the availability of individualized, comprehensive 11 college and career support for students;
  - increase FAFSA completion and college enrollment;
  - address longstanding racial and other inequities;
  - and increase access to quality CTE instruction that is aligned with specific degree and career pathways.
- Incentivize schools to create innovative blends of honors, AP, dual credit, and CTE courses to build out the course sequences that currently do not exist. Looking for these creative opportunities to build pathways where course components already exist would be a good use of limited resources and existing assets within our schools.

RECOMMENDATION 2: Enhance Support for Small, Rural, and Tribal Schools

The state’s seven-year Next Gen CTE pilot initiative has the potential to make leaps toward fully integrating CTE into the secondary experience across the state.

Short-Term Opportunity
- Ensure tribally controlled and BIE schools have equitable access to essential and adequate funding for similar pathway components, including amending the Next Gen CTE statute and conducting outreach to and collaborating with tribal nations and BIE-funded schools about Perkins V funding.

Long-Term Opportunities
- Complete an analysis of the CTE Pilot to understand the reach and impact on small, rural (as defined by the NM PED), tribally controlled, and other BIE-funded schools.
- Use the analysis to inform and design an intentional rural and tribal career pathways initiative, possibly patterned off of the New Mexico High School Redesign Network (HSRN) initiative where schools would receive coordinated state, federal, and philanthropic funding, technical assistance, and other support to implement career academies and Linked Learning approaches.
RECOMMENDATION 3: Secure Recurring, Equitable, and Sufficient Funding

In the Martinez and Yazzie Consolidated education lawsuit, the court found that New Mexico was not meeting its constitutional obligation to provide sufficient education to various at-risk students, in part related to school funding levels and financing methods. To fully remedy the failings identified by the court, the state of New Mexico must institutionalize equitable and sufficient funding. The findings of this study further underscore how inconsistent and limited funding prevents schools and districts, especially those in smaller populated schools in rural and tribal communities, from supporting and retaining CTE teachers and building course sequences for career pathway options.

Short-Term Opportunities
• Identify measures and develop a plan to provide recurring, equitable, and sufficient state funding that leverages federal funding. This should be done by the Legislature in collaboration with tribal nations, PED, HED, Indian Affairs Department, DWS, schools and districts, particularly small and rural, and other stakeholders. This could be accomplished through convening the task force requested in House Joint Memorial 2 (2020 Regular Session) introduced by Representative Sheryl Williams Stapleton and Senator Gay Kernan to “examine the funding requirements of developing career technical education programs statewide” due to New Mexico’s limited and inequitable funding for CTE.
• Make adaptations and allow spending flexibility for operating during a global pandemic. Equipment and supplies were limited prior to the COVID-19 pandemic and now the supplies and equipment cannot be shared among students and classes due to closed facilities. Students need access to the necessary tools for hands-on learning while away from school buildings.

Long-Term Opportunities
• Amend statute and appropriate sufficient funding to support schools and districts, particularly tribal and rural, to move from inconsistent grant funding to recurring, equitable, and sufficient funding for all college and career supports.
• Co-develop sustainability plans with all schools and districts (rural, tribal, and urban) to strengthen the continuum of college and career programming, pathways, and supports.
• Provide funding for each school to implement a college and career support plan that includes shared equipment and shared hands-on learning facilities, possibly in partnership with local postsecondary institutions and local businesses.

RECOMMENDATION 4: Increase Broadband Access

While several efforts are already underway, the state could consider additional actions with a goal of ensuring 100% residential broadband internet access for all.

Short-Term Opportunities
• Establish a state-tribal workgroup to develop a New Mexico Digital Inclusion Plan that would recommend how resources and efforts could be maximized and coordinated to ensure equitable digital access supporting educational engagement across the continuum. This should include actions to address the cost of internet service, particularly in rural and native communities, that further disenfranchises students.
• Create a “unified policy” and designate a single entity to be “…in charge of coordinating the State’s Broadband Policy,” as recommended by the New Mexico Legislative Finance Committee.

Long-Term Opportunities
• Launch a new outreach and coordination campaign patterned after NM Counts 2020, to coordinate and focus public, private, and philanthropic efforts to best serve “hard to connect” communities. This could include support for local community planning and capacity building efforts in areas where there are known gaps in broadband access so they can better compete for federal and state funding.
• Create and fund a low-income discount, subsidy, or voucher program to reduce the cost to low-income households to access broadband services, particularly in rural and tribal areas. The state and tribal nations would create criteria and a mechanism for determining eligible households for this program. Additionally, companies that receive federal or state support for broadband services should be required to participate in this program.

RECOMMENDATION 5: Maximize Business and Education Partnerships

Our study found that partnerships with higher education institutions as well as industry and local employers are an essential part of comprehensive college and career supports. The Legislature and Administration can take intentional steps to build partnerships and strengthen collaborations that support college and career preparation.

Short-Term Opportunities
• Incentivize secondary and postsecondary schools to pool and collaborate in Perkins V and Next Gen CTE Pilot funding to expand career pathway options.
course sequences that result in a credential or degree.

- Create toolkits and share model practices for convening partners and establishing long-term relationships (including formal contractual agreements) between schools, local employers, and communities. (Every study participant understood that the key to any work-based learning experience is hinged on partnerships with local employers.)

Long-Term Opportunities

- Examine tax and other incentives that would lower barriers to entry for smaller and rural employers to partner with schools in providing work-based learning opportunities.
- Expand and scale FFE’s X3 internship to meet the college and career preparation needs of all students, ensuring that they adapt their approach to address the barriers mentioned above in the findings section regarding rural areas. Promising outcomes from strong partnerships can result in paid internships, apprenticeships, and real-world capstone projects integrated into the curriculum for every student, including well-structured opportunities for rural and tribal communities. Two schools in Northern New Mexico have partnered with FFE to design a prototype of X3 in their communities.

While the challenges of protecting the health of children and the education workforce have been daunting for schools throughout 2020, most have risen to the occasion, working hard to transform the way teaching and academic learning happens. As one administrator participant phrased it: “learning can happen at any time and anywhere.” Our school systems are presented with the opportunity to identify the transformations necessary to increase equity and place student and community needs at the center of solutions. As our state heals from the loss of human life and the economic impact of the COVID-19 pandemic, it is more urgent than ever that New Mexico lean into systematic changes and innovations in educational practice and policy. Our children and youth are continuing to learn during these unprecedented times and they need increased access to relevant, academically challenging, and career-technical education that will prepare them to obtain the high-quality jobs and careers of the 21st century. Our schools are eager and ready to leverage flexible resources to build upon the existing college and career supports to expand students’ pathways for college, career, and civic participation. A broad collective effort will be essential to address course and program availability, create access to necessary resources and supports, and improve and expand partnerships that prepare our students for life beyond high school.
references


4 Learn more about graduation and proficiency rates in New Mexico at [https://newmexicoschools.com/](https://newmexicoschools.com/).

5 In a recent report, the New Mexico Legislative Finance Committee projected that New Mexico students will have significant loss of learning due to COVID-19’s impact on schools, further exacerbating existing learning gaps. With no clear end to the pandemic in sight, the impact on teaching, learning, and long-term educational attainment will be studied by scholars, practitioners, and policy makers for years to come. https://www.krqe.com/news/the-impact-on-teaching-learning-and-long-term-educational-attainment-will-be-studied-by-scholars-practitioners-and-policy-makers-for-years-to-come.


9 For Santa Fe Public Schools Attributes of a Graduate, see [https://www.sfps.info/board_of_education/mission__vision__core_beliefs. For Mission: Graduate’s Central New Mexico Corporation.](https://www.sfps.info/board_of_education/mission__vision__core_beliefs. For Mission: Graduate’s Central New Mexico Corporation.)

10 Patrick, S., Worthen, M. & Truong, N. (2017). Redefining student success: Profile of a New Mexico High School Graduate. INACOL.


13 The Linked Learning model includes four key components: rigorous academics, CTE, work-based learning and comprehensive support services. For details about Linked Learning components, see [https://www.linkedlearning.org/about/linked-learning-approach.](https://www.linkedlearning.org/about/linked-learning-approach.)

14 The individual learning plan (ILP) can provide an organizing framework for each student’s pathway through the courses and supports available in high school and on to postsecondary education and employment. A high-quality ILP is “[a] personalized planning strategy that supports college and career readiness by assisting students in selecting courses that align to self-defined career goals, a process that facilitates career development and career exploration activities, and a portfolio document that organizes these course plans and career development activities as well as serves as a repository of record for personal accomplishments and workforce readiness skills.” V. S. Solberg, V. S., Phelps, L. A., Haakenson, K. A., Durham, J. F., & Timmons, J. (2012). The nature and use of individualized learning plans as a promising career intervention strategy. Journal of Career Development, 39(6), 500-514, p. 502.


17 For Santa Fe Public Schools Attributes of a Graduate, see [https://www.sfps.info/board_of_education/mission__vision__core_beliefs. For Mission: Graduate’s Central New Mexico Corporation.](https://www.sfps.info/board_of_education/mission__vision__core_beliefs. For Mission: Graduate’s Central New Mexico Corporation.)


19 For details about Linked Learning components, see [https://www.linkedlearning.org/about/linked-learning-approach.](https://www.linkedlearning.org/about/linked-learning-approach.)


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30 A review of the role of college counseling, coaching, and mentoring on students’ postsecondary outcomes. [Research Brief]. New York: College Board.

31 For Santa Fe Public Schools Attributes of a Graduate, see [https://www.sfps.info/board_of_education/mission__vision__core_beliefs. For Mission: Graduate’s Central New Mexico Corporation.](https://www.sfps.info/board_of_education/mission__vision__core_beliefs. For Mission: Graduate’s Central New Mexico Corporation.)


34 Gaining Early Awareness and Readiness of Undergraduate Programs (GEAR UP) is a federal grant program to support college preparation in low-income middle and high schools.


38 A review of the role of college counseling, coaching, and mentoring on students’ postsecondary outcomes. [Research Brief]. New York: College Board.

39 For details about Linked Learning components, see [https://www.linkedlearning.org/about/linked-learning-approach.](https://www.linkedlearning.org/about/linked-learning-approach.)
There was not a clear definition of career pathways in the development of the study instrument. From the responses, it is clear that many of the schools listed CTE course offerings as career pathway options available to students. Participants were not asked to explain the extent of integrated rigorous academics, course sequences, work-based learning and comprehensive supports. Participants did not provide information about the prevalence of CTE concentrators in their student body.

See AP Exam Pipeline data visualization at https://ccpi.unm.edu/visualizations/ap-exam-pipeline.

Learn more about the New Mexico Next Gen CTE Pilot at https://webnew.ped.state.nm.us/bureaus/college-career-readiness/career-technical-education/funding/nextgen/.

While not the only placement exam used in New Mexico, the Accuplacer exam was most mentioned by participants in this study. The College Board product is widely used by colleges to assess students’ readiness for introductory-level college content and thus determines course placement.


New Mexico Public Higher Education Department, About GEAR UP. https://hed.state.nm.us/resources-for-schools/GEAR-UP/about.

The PED College and Career Readiness Bureau provides regional labor market information (LMI) for schools to select programs of study that align with jobs in the area. A majority of the seven-county service area is designated as Region B by the PED. The target industries for CTE programming in Region B are: healthcare, STEM/IT--computer science, and skilled trades, including green technology and broadband infrastructure. See NMPED Labor Markets in New Mexico’s Career and Technical Education Region B at https://webnew.ped.state.nm.us/wp-content/uploads/2020/06/Region-B-LMI.pdf.

Learn more about Broadband Now at https://broadbandnow.com/New-Mexico.

Learn more about CTE licensure requirements at https://webnew.ped.state.nm.us/bureaus/licensure/how-to-apply/secondary-vocational-technical/.


37 See New Mexico State Law, Section 22-1-1.2(B) NMSA 1978.

38 See AP Exam Pipeline data visualization at https://ccpi.unm.edu/visualizations/ap-exam-pipeline.

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