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I. Executive Summary

Public schools use multiple strategies to prepare students for life after high school graduation, including rigorous academic course offerings aligned to higher education admission requirements; career and technical education (CTE) classes with work-based learning (WBL) opportunities; and a range of support services that target students’ need for social-emotional, academic, and career-related supports to become college or workforce-ready. These strategies prove to be most effective when implemented in coordination with one another and not as separate initiatives.\(^1\) In New Mexico, there have been multiple models, programs, and projects aimed at taking a comprehensive approach to improve the secondary experience and provide college and career preparation for students. While these attempts provide highly useful local examples of promising practices, they have fallen short of redesigning high schools in ways that engage all students. Neither have they been implemented at a scale that reaches a critical mass of New Mexico high schools.

The disappointing outcomes of New Mexico’s approaches are evidenced in the state’s data; high school graduation rates, the rates at which graduates are “college and career ready,” participation in career and college readiness opportunities, and the percentage of students enrolling in college after high school. In 2018, New Mexico ranked 33rd in the nation for the percentage of high school graduates enrolling in college. Approximately 61% of recent high school graduates (12,652 students) enrolled in postsecondary institutions within 12 months of graduation.\(^2\) In New Mexico, College and Career Readiness (CCR) participation is a school accountability measure used by the Public Education Department (PED), in combination with graduation rates. Participation in or obtaining credit in at least one of these activities is a graduation requirement; hence the overall CCR participation measure (78%) is consistent with the overall graduation rate (77%).\(^3\) In 2019-20, 65,102 New Mexico students\(^4\) (approximately 66% of the high school population) participated in CTE courses.\(^5\) However, only 16% (N = 15,433)\(^6\) of the high school population in New Mexico took more than two or more courses in a sequence, the minimum required to be a CTE concentrator.\(^7\) In SY 2019-20, approximately 15% of high school students were in dual credit, and a total of 2,485 high school students (approximately 3.8% of high school students in the state) participated in courses identified as WBL.\(^8\) Exploring these data points deeper revealed disparities within demographic subgroups, with too few students benefiting from college and career programming.

To address this statewide challenge, New Mexico needs a comprehensive strategy that weaves together promising local college and career-readiness practices with a robust statewide “college and career pathways” approach. To inform efforts, the New Mexico Public Education Department and the Los Alamos National Laboratory Foundation (LANLF) commissioned this research project to identify and assess the valuable lessons learned and progress made by schools, communities, the state, and tribes who have engaged in career and college readiness initiatives.
These initiatives include High Schools that Work, the Next Gen CTE Pilot, the High School Redesign Network, Early College High Schools (ECHS), the Leadership Schools, the NACA Inspired Schools Network, and the College Horizons’ readiness programs. College and career readiness programs like these aim to support schools, districts, and communities to:

- align CTE with relevant core academics emphasizing real-world application, project-based learning, performance assessment, and personalized student supports;
- connect classroom instruction to a continuum of WBL experiences, including mentoring, job shadowing, internships, and school-based enterprise;
- provide a system of personalized student supports with attention to college and career advising and accelerated instruction in reading, writing, and mathematics; and
- provide all students, particularly at-risk students who are the focus of the Martinez/Yazzie lawsuit, with sufficient, culturally- and linguistically-responsive programs and services necessary for them to be college and career-ready.

This project focused on two main questions for this report:

- What can be learned from PED initiatives and innovations already underway in New Mexico high schools and districts that can inform districts, schools, employers, and other community stakeholders seeking to implement the components listed above in an integrated way, based on a set of research-based standards that are appropriate for New Mexico?
- Using these learnings, what actions can the state government, tribal governments, and other entities take to promote and support such CTE and college and career pathways to transform high schools in ways that address the Martinez/Yazzie lawsuit findings?

Promising Practices from the Field
Local education, business, and nonprofit leaders from across New Mexico shared their perspectives and insights about promising practices and opportunities to enhance college and career pathways in New Mexico. Here are some examples:
Aligning CTE with Core Academics

• Schools embrace a **college- and career-bound culture and adapt structures** and practices to expand course sequences that align CTE with core academics.
• Districts and schools are **leveraging out-of-region institutions** and building new partnerships, where necessary, to make aligned academics accessible for students.
• Schools worked to create a seamless transition between levels of schooling by developing strong ties with feeder schools, consistent and aligned **communication and messaging** about college and career opportunities, and providing students and families with in-depth information about the pathways at meetings and on the school or district websites.

Connecting Instruction with Work-Based and Experiential Learning

• Schools with strong classroom connections to WBL and experiential learning opportunities demonstrated mutually beneficial **relationships with local industry partners**.
• Schools demonstrating a strong connection between instruction, WBL, and experiential learning consistently pointed to **private grant funding** as a critical source of additional support that robust connections require.
• Schools have helped bridge opportunity gaps by offering **on-site learning experiences**, creating numerous entry points to dual credit, WBL, CTE, internships, and capstone courses.

Providing Systems of Personalized Supports

• WBL and experiential learning opportunities that build positive relationships with adults and potential employers offer students from marginalized and under-served communities a way to expand their **social capital**, which is critical for long-term success.
• Schools providing school-based **mentoring and individualized student advising** provide students with smoother transitions between school levels and increased access to college and careers.
• Schools **mitigate transportation barriers** that create opportunity gaps through virtual spaces, on-site opportunities, and even co-locating with business partners.
• **Dynamic professional development** efforts such as teacher externships and paid training programs provide teachers with in-depth knowledge of the field to deliver instruction that most closely mirrors the workforce skills students will need for success in their chosen field.

Ensuring Culturally and Linguistically Responsive Programs

• Successful practices **centered students’ cultures and languages** as a core function rather than a compliance activity due to the Martinez/Yazzie court ruling.
• Schools and districts **identified and tackled systemic barriers** by updating structures and policies that often prevent students from participating in essential academic opportunities in advanced courses.
• Programs **committed to equity-focused expectations** undergo regular evaluation processes that include constructive feedback and support to ensure the fidelity of comprehensive approaches, quality improvement, and equity in programmatic implementation.
Recommendations
Systemic change requires a complete paradigm shift in the way education agencies and schools approach college and career preparation and ultimately how students are supported throughout their time in the education system, from kindergarten through higher education. The following local- and tribal / state-level recommendations emerged from existing knowledge, research in best practices, data from secondary sources, qualitative and quantitative data from the advisory committee, and interviews with school sites as articulated in the Promising Practices section above. These recommendations hold students at the center and are grounded in four interrelated pillars; equity, integration, relationship, and responsibility.

◊ **Equity**: The fundamental guiding principle for the research and the recommendations is to create systems that promote and support historically marginalized communities.

◊ **Integration**: The recommendations must be integrated into the culture of each school and the community and should be inextricably aligned with the curriculum and student achievement goals.

◊ **Relationship**: The recommendations include student voice and building relationships between individuals and the community rather than a top-down structure, as this will support long-term change.

◊ **Responsibility**: Rather than focus on accountability with potentially negative connotations, responsibility focuses on each student’s assets and long-term care.

The team offers a suggested 4-year pilot project that connects these two levels of implementation and provides actionable steps that schools and districts can take up, reflected in the draft Request for Applications (RFA). Based on many of the conversations, the research team believes the local-level actions will be successful in the short term. Still, it is unlikely the change will be sustainable once the funds expire without tribal / state-level action. For a long-term systemic change, larger actions are necessary to create the conditions for promising practices in the field to thrive on an extensive scale.
Local Level Actions

I. Collective Planning
- Establish a planning team to develop a college and career pathway map and plan that clearly illustrates pathways to college and career for students beginning no later than freshman year.

II. Align CTE with Core Academics
- Take steps to intentionally integrate CTE courses into the curriculum through team and project-based teaching approaches and redesign course schedules to offer aligned sequences and topical courses.
- Use available tools such as Graduate Profiles to develop community-based measures and data collection methods based on community stakeholder input and engagement.

III. Connect Instruction with Work-Based and Experiential Learning
- Create on-campus, virtual, and summer internships that provide various modes of engagement and minimize transportation barriers for all students.
- Develop a campus lab initiative that integrates student learning opportunities into campus improvement and expansion projects.

IV. Provide Systems of Personalized Supports
- Establish school-based pathway teams to provide guidance and local expertise to PED, collect and submit data, and create strong support networks for students.
- Schools and districts should formalize higher education partnerships to establish strong career, internship, and employment programming that supports student work-based and experiential learning opportunities, including campus employment, paid internships for course credit, national service, and blended advisement.

V. Ensure Culturally and Linguistically Responsive Programs
- Align comprehensive pathway strategies to a Culturally and Linguistically Responsive (CLR) Framework that includes a system of personal supports, early and ongoing outreach and communication, and equity-focused participation, completion, and outcomes data.
- Conduct early, ongoing and adaptive outreach and communication regarding college and career options specifically addressing special populations’ needs, like English Language Learners (ELL), Students with Disabilities (SWD), and first-generation college-bound students.
Tribal / State Level Actions

I. Direct Resources for Comprehensive Strategies

Increase Funding

• Coordinate with the Department of Workforce Solutions (DWS) and philanthropy to build regional youth employment and opportunity funds to support Regional CTE programming, College and Career Pathway Coordinator roles, paid internships and apprenticeships, employer training, and experiential learning opportunities.

• Expand Local Education Agency (LEA) WBL and experiential learning budgets to support comprehensive college and career pathways planning, programs, and initiatives.

• Allocate and amplify dedicated funding for transportation in rural district budgets to support college and business field trips.

• The state should continue to improve broadband infrastructure (while acknowledging the need to be flexible with college and career pathways goals given the constraints) and work with schools and districts to adapt requirements and provide guidance on supporting students through the pathways when technical barriers emerge.

II. Increase Data Transparency and Evaluation Support

• Support equity-focused evaluation of all pathways programs to establish local best-practices guides and standards, including robust and formative assessments that help schools and districts problem-solve and remove the stigmas of punitive, deficit-focused evaluations.

• Create and maintain an online portal to encourage data collection and public dissemination of findings at state and local levels to understand the effectiveness of programs and whether they are meeting their equity goals.

III. Streamline Government Structures

• Create a centralized State Coordination Office for College and Career Pathways to implement a cohesive and comprehensive college and career pathways system. This dedicated office with dedicated personnel can work at the intersection of PED, the Higher Education Department (HED),
DWS, and Tribal governments. It can include a Director and Coordinator of a **P-20 Alignment Team** and facilitate a **Youth Pathways Council** for ongoing advisement and accountability to youth.

- Work with Tribal Leadership to develop **Cultural Career Pathways**. These Pathways will allow Native American students the opportunity to gain work skills related to important careers in tribal communities (e.g., language, arts, farming, etc.) and tribal leadership positions within their home communities.

**IV. Provide Targeted Support and Guidance**

- **Provide administrative training** in budgeting, redesigning schedules, and equity-focused data for sustained change.
- **Develop an equity training program and expand professional development** to support culturally responsive college and career programming practices. The program should include college and career readiness training (teaching students self-advocacy, note-taking, test-taking, soft-skills development, and other college and career readiness skills) for all teachers at every level of education.
- **Incentivize training and recruitment of bilingual and special education teachers** to meet the linguistic and ability needs of the diverse student population in New Mexico.
- **Host a state/local business and education summit** to develop relationships between sectors, break down the silos and barriers, allow for broad partnerships, and encourage deeper collaborations for student postsecondary and career success.

**4-Year Pilot Program**

The research team recommends that the PED implement a 4-year pilot program, informed by promising practices from New Mexico, to facilitate the expansion of comprehensive college and career pathways. This pilot program would create the opportunity for districts, schools, and communities to work closely with the PED and tribes to design, implement and assess comprehensive approaches. The pilot also allows PED to use the learning from ongoing implementation to design a long-term, statewide plan that scales comprehensive college and career pathways.

**Conclusion**

In essence, we cannot shuffle the cards and hope for a better deal; we must call for a new game, one that builds on our communities’ wealth and does not seek to further marginalize their potential. As one advisory team member stated, “We know what needs to be done.” The question is: do we have the energy and vision to actualize what our students are surely capable of achieving? These findings and recommendations present community success and community knowledge that can provide a pathway for those who have the passion and determination to build a stronger system for all students throughout New Mexico.
II. Introduction

There is a growing body of evidence that college and career pathway models positively impact students’ college and career outcomes. The multitude of college and career supports (i.e. CTE courses provided along with work-based learning opportunities, comprehensive support services, and rigorous academics aligned to higher education admission requirements) provided in public schools are most effective when implemented in coordination with one another and not as stand-alone initiatives. In New Mexico, there have been multiple attempts to take up approaches, models, programs, and projects to improve the secondary experience and provide college and career preparation and pathways for students. While these attempts have been in good faith, all have fallen short of redesigning high schools at a scale that can reach all students. We can no longer continue to shuffle the same cards and hope for a better deal; we must call for a new game to resolve this statewide challenge with a comprehensive approach that weaves together promising local practices to college and career-readiness strategies through a robust college and career pathways approach.
A. Project Background

In 2018, the New Mexico First Judicial District Court ruled on Martinez and Yazzie v. State of New Mexico (Martinez/Yazzie), 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.” The ruling further detailed (among other elements) that the State “failed to provide at-risk students with programs and services necessary to make them college or career ready.” The New Mexico Legislature determined that a key element of sufficient education is providing students 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 comprehensive college and career pathways play in a sufficient public education and the urgency for the State to meet its constitutional obligations to the children of New Mexico.

In order to support more comprehensive, robust, and relevant college and career pathways, the New Mexico Public Education Department (PED) and the Los Alamos National Laboratory Foundation (LANLF) commissioned this project to identify and assess the valuable lessons learned and progress made by schools, communities, the state and tribes as part of various initiatives. These initiatives include High Schools that Work, the Next Gen CTE Pilot, the High School Redesign Network, Early College High Schools, the Leadership Schools, the NACA Inspired Schools Network, and the College Horizons’ readiness programs.

College and career readiness programs like these aim to support schools, districts, and communities to:

- align Career Technical Education with relevant core academics emphasizing real-world application, project-based learning, performance assessment, and personalized student supports;
- connect classroom instruction to a continuum of work-based learning (WBL) experiences, including mentoring, job shadowing, internships, and school-based enterprise;
- provide a system of personalized student supports with attention to college and career advising and accelerated instruction in reading, writing, and mathematics and
- provide all students, particularly at-risk students who are the focus of the Martinez/Yazzie lawsuit, with sufficient, culturally- and linguistically responsive programs and services necessary for them to be college and career-ready.

This project focused on two main questions for this report:

- What can be learned from PED initiatives and innovations already underway in New Mexico high schools and districts that will improve how districts, schools, employers, and other community stakeholders successfully advance the components listed above in an integrated way, based on a set of research-based standards that are appropriate for New Mexico?
- Using these learnings, what actions can the State, Tribal governments, and other entities take to promote CTE and college and career pathways that address the Martinez/Yazzie lawsuit findings?
Exploring these questions allowed the researchers to gauge the extent of interest schools and other education stakeholders had in collaborating to develop more comprehensive college and career pathways containing the components listed above as a strategy for advancing equity among students furthest from opportunity.

Lastly, the research included developing a draft Request for Applications (RFA) outlining the design of a potential pilot project. The pilot could support a cohort of districts, schools, employers, and other community stakeholders interested in using the components listed above to create integrated, comprehensive college and career pathways built on the state and tribes’ existing knowledge and experience.

It is important to note that this report is not designed to be a how-to-manual or deep research on the many attempts and programs; those guides and studies already exist and were used as a launching point to begin this local inquiry. This report explains the strong practices in local communities that, if brought to scale, have the potential to create an equitable reality in New Mexico. This reality fully integrates college and career readiness activities and supports into structured pathways for all students. To that end, the promising practices and recommendations provide clear understandings and actions for schools and districts to move toward integrated pathways and point to opportunities for the state and tribes to make systemic changes that create conditions for equitable and dynamic transformation.

B. Methodology
The researchers conducted this study primarily through a qualitative lens, with quantitative data to provide insight and depth to the various understandings and knowledge gained from individuals, schools, and entities. The process was rigorous and organic, allowing for fluidity and exploration throughout the data collection and analysis process. The research team consisted of three life-long educators with almost a century of combined experience in the field (P-20). Each team member also brought over thirty years of experience conducting evaluations throughout New Mexico and the United States. Further, Dr. Lee Francis IV is a successful Native American entrepreneur and business owner and has participated in WBL activities at his business for nearly a decade. The insights and understandings from the research team employed an assets-based framework focusing on equity, cultural responsiveness, and community-based systems development. Throughout the process, the research team intentionally balanced the various needs and viewpoints of collaborators, partners, and stakeholders and validated the learnings through an internal triangulation method and iterative analysis that accounts for but does not entirely dismiss internal biases during the study.
In close coordination with the LANLF and PED, the research team identified and engaged PED staff, tribal representatives, school leaders, and other stakeholders to form an internal advisory committee. The committee helped inform the study process and identify lessons learned from innovative practices and current and historic pathway initiatives. The advisory committee convened four times throughout the Fall of 2021. Each gathering consisted of an intentional conversation designed to inform the project by sharing existing knowledge and expertise, envisioning comprehensive pathways, collectively processing learnings, and exploring possible recommendations. In addition to meeting monthly with the advisory committee, the research team met biweekly with the PED and LANLF to shape the direction of the study and provide support for the framework, findings, and final recommendations.

The data collection included over 50 interviews, focused conversations, and site visits to understand existing pathway designs, needs, and positive outcomes. As part of the iterative analysis, conversational data were triangulated with the diverse perspectives from the advisory committee and other relevant data, including historical understandings and educational experiences. Data collection included questions regarding career pathway options; course offerings (e.g., Career Technical Education, dual credit, capstone courses, etc.); administrative staff supports (e.g., college and career counselors, social workers, CTE coordinators, etc.); programmatic components (e.g., facilities, equipment, curriculum, and instruction); and college and career partnerships (e.g., industry partners, internships, youth employment, college transition supports, etc.). The study design intentionally included different types of schools (i.e., charter, tribal, and public), different sizes, rural and urban schools, with and without CTE programs, and business leaders. The research team explored PED, district, school, and pathway program documents, websites, and resources to identify contextual information about students’ access to college and career pathways at secondary schools.

C. Study Limitations

In any study, it is important for researchers to point out limitations that may have influenced the understandings or outcomes. Although there may not be a significant impact, several limitations affected the research team’s work. Considering these limitations provides a clearer understanding of the process and how the research team could accomplish the study’s stated goals.

The project had an exceptionally ambitious timeline, especially considering the ongoing struggles with COVID-19. When the project launched in the late Summer of 2021, the research team only had two members and remained in the design and planning phase until the late addition of a final team member in September. The complete formation of a diverse, New Mexico-based team was critical to providing the capacity, experience, and worldview necessary for this short-term project.

The subsequent five months of stakeholder engagement coincided with students returning to school during the pandemic as New Mexico communities and businesses managed the pandemic’s social, emotional, and economic impacts. This sometimes made it difficult for educators to meet, including members of the advisory team. COVID restrictions and personal hesitations limited the ability to do some site visits. Consequently, meeting with site administrators and leaders virtually was often more accommodating than meeting in person.

The data collection phase was ongoing throughout the study. The team found that data consolidation from documents and web-based resources was exceptionally difficult because there is no comprehensive, historical record of the CTE initiatives implemented throughout the state. In addition, there is remarkably little data measuring
student outcomes related to CTE. For example, data regarding the number of CTE participants and concentrators who matriculate to college and find careers in a given occupation is unavailable. Furthermore, when data were available, data from the PED did not match data from the National Center for Educational Statistics and the U.S. Department of Education Office of Career, Technical, and Adult Education. An example of misaligned data included the number of secondary concentrators. For instance, in 2019-20, the PED database indicated 13,430 concentrators in New Mexico compared to 15,443 reported by the U.S. Department of Education Office of Career, Technical, and Adult Education Division of Academic and Technical Education. Other issues included disagreement between the number of Early College High Schools in New Mexico and the percentage of low-income students in school districts compared to those in the National Center for Educational Statistics.

The absence of data and misalignment made data analysis time-consuming and challenging. This was especially true when trying to understand the level of access to college and career pathways for students underrepresented in postsecondary education. Determining the existence, lifespan, and efficacy of college and career models and approaches, the researchers found no centralized record tracking the various initiatives, participating schools, or outcomes. This information could only be gathered by piecing together information from the initiatives’ websites and sporadic legislative reports. Furthermore, all qualitative outcomes, such as increasing student agency, employability skills, and personal attributes, are anecdotal. Programs and schools do not have consistent qualitative measures that are publicly available.

Finally, there was a distinct lack of general participation from the private sector in this study. The evaluation team did have the chance to connect with a small group of business owners; when reaching out to several Chambers of Commerce to learn more about the school connections in various areas around the state, only two responded to a request for contact. This effort included a follow-up in which both local chamber representatives referred the team to the local school district for information. Ultimately, these limitations did not hinder the research team but did necessitate some compromises in the data collection phase of the work.
In SY 2019-2020, 99,266 high school students were enrolled in 186 public districts or charter schools under supervision from the New Mexico Public Education Department. Approximately 6,000 Native American students (K-12) were enrolled in 28 Bureau of Indian Education (BIE) operated and tribally controlled schools. A glimpse into the past twenty years of college and career preparation efforts in New Mexico reveals numerous attempts to improve the existing system through various programmatic models and approaches. While all aimed at better preparing students for college, career, and life, none have proven to be the “silver bullet” that improves outcomes for all students in New Mexico. Some districts and schools embraced some approaches and models to supplement existing structures, while others aimed to supplant the system by adding new school options to the education landscape. Recently, initiatives have attempted to transform (or redesign) rather than add to existing programming. These often siloed attempts have varied in sustainability beyond grant funding and may have lacked the structure and/or resources to be scaled across the entire system.

III. Pathway Efforts in New Mexico
Exploring websites, NM PED requests for proposals (RFPs), and conversations with the project advisory committee pointed to numerous attempts to supplement and improve existing support in the education system. The chart below illustrates college and career initiatives over the past two decades and predicted to last through 2024. A brief overview of each program and model is provided in Appendix A.

In addition to the Advance CTE’s nationally recognized standard CTE Framework, strong college and career pathways integrate CTE courses, work-based learning opportunities, and comprehensive support services with rigorous academics aligned to higher education admission requirements. In New Mexico, it is a high priority that pathways demonstrate cultural and linguistic relevance and are accessible and effective for all students. This section will describe the existing components of college and career pathways and related local data, where available.

Career and Technical Education (CTE) has long played an essential role in US education and job training. The country passed the first federal law providing funding for vocational training in 1917. Early initiatives supported vocational training in education, nursing, and agriculture. In the 1960s and 1970s, legislation evolved to include specific CTE funding for marginalized populations, and we see the first references to postsecondary education. In 1984, legislators established the Carl D. Perkins Vocational Education Act, and by 1990 the launch of what we consider “modern” CTE began with the Carl D. Perkins Vocational and Applied Technology Education Act Amendments. The amendments focused on accountability and secondary-postsecondary alignment, and business partnerships. The historical legacy of “tracking” students of color, students with disabilities, English Language Learners, and economically disadvantaged students into vocational and technical education instead of college and career preparation remains a national issue.
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 (WBL), integration of technical skills within the academic curriculum, career counseling, and more. CTE combines academic and technical skills with the knowledge and training necessary to succeed in future careers. Most CTE intends to introduce students to workplace competencies by providing hands-on experience. Rigorous program standards are foundational to high-quality CTE programs and build upon the National Career Clusters® Framework. Several studies have shown positive outcomes for students who take CTE courses. The impact is even greater for CTE concentrators, who, nationally, 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.17

In 2019-20, 65,102 New Mexico students18 (approximately 66% of the high school population) participated in CTE.19 Approximately 16% (N = 15,433)20 of the high school population in New Mexico were CTE concentrators. Of that 16%, the majority (63.8%) of secondary CTE concentrators21 were Hispanic/Latino (N = 9,846 students), 22% were White Non-Hispanic (N = 3,395 students), and 10.7% were Native American (N = 1,651 students). Less than 2% were of other races/ethnicities (N = 308 students). The majority (79.5%) of secondary CTE concentrators were economically disadvantaged (ED), 12.9% were SWD, and 12.4% were ELL.

Current and reliable data is not available to the researchers on individual CTE concentrators’ progress and outcomes (i.e., course completion status, certificate attainment, graduation, college enrollment, and employment). Based on publicly available data, we ascertain that in 2019-20, 84% of all high school students do not become CTE concentrators. The reasons behind this are likely numerous, but one issue could be the number and alignment of course offerings. The report “College and Career Pathways in New Mexico” by the Learning Policy Institute in 2021 found that while there is a wide variety of diverse CTE offerings across the state when observing the selections in aggregate, access to these offerings varies greatly. Through interviews and data collection, the researchers found that courses were limited, especially in smaller and rural districts. Several of these districts only offered a “smattering” of CTE courses, often with little to no connection with each other.22 They also found that “breadth took priority over depth” even in large districts, with few students taking more than one CTE course in a career pathway cluster. Although data regarding the number of CTE completers in New Mexico is unclear, we know that the PED’s Perkins CTE baseline for completers in 2018-2019 was 1.1% and their target for 2019-2020 was 1.3%, suggesting that very few students complete a career pathway.

**Dual Credit** classes provide access to academic and postsecondary CTE courses. These courses simultaneously offer credit toward high school graduation and a postsecondary degree or certificate.23 In SY 2019-20,24 approximately 15% of high school students were in dual credit. Of those enrolled in dual credit: 55% were Hispanic, 27% White non-Hispanic, 13% Native American, 2% Asian, 1% African American, and 1% Multiracial. In addition, 60% of dual credit students were ED, 9.2% were ELL, and 8.9% were SWD.25 According to a New Mexico Legislative Finance Committee study, in FY16, Early College High School students took more than quadruple the number of dual credit courses compared to their peers in traditional high schools.26
In New Mexico, **College and Career Readiness (CCR) participation** is a school accountability measure used by the PED, in combination with graduation rates. Similar to national trends, 4-year high school graduation rates in New Mexico have improved substantially over the years. Despite the challenges of the COVID-19 pandemic and remote learning in 2020, the statewide rate reached an all-time high of 77%, a seven percentage point increase since 2012. Likewise, graduation rates have increased for nearly all demographic groups. Most notable is the graduation rate for ELL students, which sits one percentage point (76%) behind the overall rate. Students with disabilities have the lowest graduation rate of all groups (66%). Comparing graduation rates for students by race and ethnicity reveal additional opportunity gaps. 87% of Asian students and 81% of White Non-Hispanics graduate in 4 years compared to 76% of Hispanic students, 74% of African American, and 72% of Native American students. In addition, females graduate at a higher rate (81%) than male students (73%).

The CCR success indicator is an aggregate measure identifying students by demographic who have participated and succeeded in CCR activities. These CCR activities include PSAT/NMSQT, SAT, ACT, Concurrent Enrollment/Dual Credit, Advanced Placement, Career Programs of Study (CTE), AccuPlacer, COMPASS, IB, TABE, WorkKeys, and ASVAB. Since participation in or obtaining credit in at least one of these activities is a graduation requirement, the overall CCR success measure (78%) is consistent with the overall graduation rate (77%). Students with disabilities’ “success” rate in CCR is 42% and their participation rate 38%, suggesting a higher need to assist these students in successfully participating and succeeding in one or more of these CCR indicators.

**Work-Based Learning** experiences are school-to-career programs where students receive career exploration guidance and learn work-ready skills aligned to employment opportunities. They typically occur at a worksite during or after school and provide authentic learning experiences that link academic, technical, and professional skills. Students learn on-the-job skills that lead them to postsecondary institutions and eventually into a professional career. In SY 19-20, a total of 2,485 high school students (approximately 3.8% of high school students in the state) participated in courses identified as WBL, and 21% (534) of those students were CTE concentrators. Among the CTE concentrator population alone, 10.6% participated in WBL.

The relationship between **Systems of Personal Supports** in schools, such as academic, social, or behavioral, and better student outcomes is becoming increasingly more recognized in the state. New Mexico currently funds 33 community schools that have provided expanded learning time and social and health services for 11,048 students in the past 1.5 years. Community schools offer a plethora of personalized wrap-around services and individualized academic-related support, such as tutoring, academic and career guidance, and mentorship.

In 2019 and 2020, PED launched two initiatives supporting whole child wellbeing and personal supports; the Social Emotional Learning (SEL) framework and the Culturally and Linguistically Responsive (CLR) framework. The SEL framework promotes self-awareness, self-management, social awareness, responsible decision-making, and relationship skills for all schools to support staff, students, and families. The CLR framework provides districts and schools with guidance on implementing culturally and linguistically responsiveness in schools with the intention of “validating and affirming an individual’s home culture and language to create connections with other cultures and languages in various social contexts.” Schools were asked to share their CLR frameworks during the interview and site-visit process. Several schools were unfamiliar with their CLR frameworks, while others were in the process of developing them. Regardless of whether schools had official CLR frameworks in place, the team worked to identify practices aligned with qualities associated with the CLR framework.
IV. Promising Practices from the Field

Education, business, and nonprofit leaders who participated in the advisory committee, site visits, and interviews shared their perspectives and insights about promising practices and opportunities to enhance college and career pathways in New Mexico. A thematic analysis of programmatic data and qualitative participant contributions elevated the assets of the diverse models, approaches, and programs being initiated across the state. The learnings that follow offer promising practices and opportunities as described by leaders in their efforts to create comprehensive pathways to prepare students for college and career through their work to:

- align CTE with core academics,
- connect classroom instruction to WBL experiences
- provide systems of personal support, and
- ensure culturally and linguistically responsive programs.

The following sections provide a school spotlight that exemplifies the component of comprehensive pathways, a brief description of the promising practices learned from the field, and a brief description of an approach, program, or model that connects with this element. These are intended to be highlights of examples and not exhaustive lists of schools and programs.
A. Aligning CTE with Core Academics

**SPOTLIGHT: GADSDEN HIGH SCHOOL**

Gadsden High School (GHS), located in Anthony, NM, roughly halfway between Las Cruces and the border of Mexico, serves primarily rural communities, many of whom speak Spanish. The school provides eleven CTE programs of study, with several more on the way. School leadership focuses on building individualized programs responsive to students’ interests and growing industries like cybersecurity and biomedical sciences. CTE pathways develop students’ core academic skills and provide them with continuous education opportunities and employability credentials. CTE courses are aligned with core academics like math and provide experiential learning opportunities through Career and Technical Student Organizations (CTSO) and on-site or off-site internship programs to encourage broad, equitable access for all students. Students can participate in internships at local businesses, district elementary schools, and the GHS campus. The school publishes flow charts of every pathway indicating required coursework, the high school certification, CTSO, and aligned articulation agreement with technical certificate programs at community colleges or 4-year university degree programs. The school also provides a sequence of four classes, including a capstone course, as CTE programs of study.

GHS promotes CTE pathways through consistent student and parent outreach and communication. High school students visit the feeder elementary school to present information on the College and Career pathways to younger students and share their experiences. Many high school students recall high schoolers visiting them when they were in elementary school and its impact. This activity builds confidence and leadership skills in young adults and ensures that younger students are exposed to the CTE pathways before they reach middle school. In January of students’ 8th-grade year, three weeks before high school registration, 8th graders visit the high school for a tour and see the eleven CTE pathway programs again. In addition, all high schools in Gadsden ISD offer a clear explanation of all CTE programs of study via their website. Notably, 89% of ELLs at GHS participate in CCR activities, far above the statewide rate of 61%.

**SCHOOL DATA:**
- Enrollment: 1,557 students, 99% Hispanic, and 1% or less are other races or ethnicities. 100% of students are ED, 26% ELL, 1% or less homeless, and 12% SWD. 4-year Graduation Rate (2020): 86% overall, 86% ELL, 82% SWD.
1. Changing School Culture and Expanding Sequences
Schools in the study with aligned CTE and core academics demonstrated a school-wide college and career readiness culture through project-based approaches, team teaching, and integrated personal support across the curriculum and P-20 education pipeline. Schools with an industry focus demonstrated strong course alignment, allowing students to obtain multiple certifications, develop diverse skills, and build a portfolio of experiences for the future. Insufficient and short-term funding, reporting burdens, and minimal availability of culturally and linguistically responsive CTE teachers were most often reasons why CTE course offerings were inconsistent or non-existent - creating alignment challenges. While only 16% of high school students in New Mexico complete two or more CTE courses in a sequence, and taking only one course fulfills the Career Cluster, Workplace Readiness, Language high school graduation requirement, schools are creatively building more full sequences to enhance their career pathways. Participants pointed to proposed revisions to the graduation requirements as a potential opportunity to strengthen course alignment.

2. Leveraging Out-of-Region Institutions
Finding instructors at high school sites with the credentials to teach dual credit classes and instructors experienced in the content areas desired by students was a common challenge. Many noted this was especially difficult in the health-related fields, where potential candidates earn much more working directly in the health industry than as an instructor at a high school or even college. One district met this challenge by securing a grant through a university in Texas to pay an instructor to teach nursing and health courses. Although dual credit courses are often widely available on college campuses, transportation is a significant barrier for students because of financial resources or their rural location. Several school sites mentioned weak partnerships and a lack of desired course offerings at the postsecondary institutions within the district’s assigned Geographic Areas of Responsibility (GAR). As a result, schools cannot offer courses related to high-need occupations in the region. Some districts have partnered with colleges in neighboring states because of the weak relationships with postsecondary institutions in New Mexico. One interviewee mentioned this was less than ideal since New Mexican students cannot use their lottery scholarship outside of New Mexico, but it was the only way to meet the needs of students.

Although partnering with institutions outside of the region could introduce challenges, stakeholders express that the benefits of leveraging institutions outside the region and state for students outweigh the limitations created by the GAR policy. The GAR policy intends to help align and facilitate public postsecondary educational programs and services for school districts. Although this is a worthy endeavor, if the programming schools need is unavailable at partner institutions, this inhibits students’ access to postsecondary resources, including CTE and dual credit classes. More flexibility to partner with institutions outside the region and the state could increase the number of students completing CTE pathways and increase postsecondary enrollment.

3. Providing Early and Consistent Communication
A growing body of research reveals the advantages of introducing students to career and college preparedness techniques and awareness as early as elementary school when career interests and ambitions are developing. This study’s advisory committee and most school sites also recommended introducing students to college and career culture and readiness earlier than high school. However, many study
participants were unsure if this was happening robustly across districts and schools. Regardless, several school sites interviewed intentionally implemented programming to do so. The schools worked to create a seamless transition between levels of schooling by developing strong ties with feeder schools. These ties allowed schools to introduce career and college-preparedness techniques at a young age and create a school culture of college and career. Several high schools visited their feeder elementary and middle schools to present information on the career clusters available at the local high school. They also provided middle schoolers with high school tours, including tours of the CTE classrooms. The schools shared resources, including advisors and professional training. Communication was consistent and aligned between schools. The schools provided students and families with in-depth information about the pathways at meetings and on the school or district websites.

Aligned Program Example

One approach under-taken by some New Mexico schools and districts is Linked Learning. The Linked Learning approach contains four program elements: rigorous academics aligned to admissions requirements for state colleges and universities, career technical education organized in a structured sequence of courses, work-based learning experiences, and personalized student support. The approach organizes students into pathways or academies and attends their classes as grade-level cohorts, each served by an interdisciplinary team of academic and CTE teachers. Pathways focus on digital media arts, education, engineering, energy, health professions, and more. All content areas (math, science, English, social studies, world language, and the arts) emphasize real-world application, project-based learning, and performance assessment. Career technical education courses are delivered in a sequence of 4 or more courses. Work-based learning begins with career awareness, mentoring, or job shadowing in grade 9 and evolves into internships, apprenticeships, or school-based enterprise by grade 12. The personalized and individualized support services ensure equity of access and success. Services include college and career counseling, supplemental instruction to address individual needs, and attention to social and emotional learning. Districts currently taking up the approach include Farmington and Gallup/McKinley County Schools. Also, see High Schools That Work in Appendix B.
B. Connecting Instruction with Work-Based and Experiential Learning

**SPOTLIGHT: HEALTH LEADERSHIP HIGH SCHOOL**

Health Leadership High School is a part of the Leadership Schools Network. Health Leadership focuses on “being family first” and has built a staff structure that provides every student with the personal, social, emotional, and academic support needed to succeed. For example, the school has three professional social workers, one social work intern, and one career coach. Teachers serve as advisors to students and follow them throughout their high school experience. The school has adapted the cohort model to move students through personal growth. The project-based charter school aims to improve educational, career, and life outcomes for marginalized students, many of whom have dropped out or are at-risk. Every course at Health Leadership has a college and career readiness angle, and students graduate, on average, with at least four certificates. During the COVID pandemic, the school responded to community needs by condensing the 12-month Community Health Worker (CHW) credential training into eight months. Via this effort, students proudly engaged with the local community by providing bilingual COVID outreach in partnership with local health organizations. The school has over 50 partnerships with local businesses, government entities, and nonprofits that support work-based learning. Additionally, every student at Health Leadership completes a paid internship through Future Focused Ed’s X3 internship program, where business partners fund deep, work-based learning opportunities. Health Leadership has had challenges but is building the capacity to recruit and retain high-quality people who connect with the student population they serve, approach their work with cultural and linguistic relevance, and own their school’s mission and vision.

**SCHOOL DATA:** Enrollment- 240 students, 89% Hispanic, 5% White non-Hispanic, 4% Black or African American, and 2% or less are other races or ethnicities. 97% of students are ED, 27% ELL, 4% homeless, and 11% SWD. 4-year Graduation Rate (2020): 54% overall (up from 7.5% in 2015), 55% ELL, 53% ED, 44% SWD.
1. Maintaining Strong Business Partnerships
Schools with strong classroom connections to WBL and experiential learning opportunities demonstrated mutually beneficial relationships with local industry partners. While most schools in the study faced challenges with establishing long-term partnerships beyond the education sector, others managed to keep up with over 50 collaborative and supportive partnerships with nonprofits and businesses. The business partners the researchers spoke to indicated that establishing industry-specific relationships is most effective in creating partnerships for WBL, high-quality work experiences, and internship opportunities - broad outreach and requests for funding are highly ineffective.

2. Grant writing to Fund Programming and Create Flexibility
Schools demonstrating a strong connection between instruction, WBL, and experiential learning consistently pointed to private grant funding as a critical source of support. Reporting requirements, strict limitations, and the short-term nature of state and other public funding to support full integration and alignment were disincentives for schools and districts. School leaders cultivated fruitful relationships with philanthropic organizations willing to provide flexible funding to support coordinator positions, training, partner development, and student access initiatives.

3. Providing On-Site Learning Experiences
Programs that give students exposure to postsecondary learning experiences, like dual credit and CTE courses, are widely known to benefit students. Research indicates these opportunities increase the likelihood of students underrepresented in higher education enrolling, persisting, and succeeding in college.42 Dual credit (including classes focused on CTE) is delivered in various methods across the state; on college campuses, in high schools with a qualified instructor, and online. Most advisory group participants and interviewees agreed that students benefit from attending classes at postsecondary institutions. They also voiced the benefits of off-campus WBL opportunities such as internships. However, they also acknowledged the challenges underprivileged students face when participating in off-campus activities and the resulting opportunity gaps that this can create. Many participants believed that students who lack transportation, those residing in rural communities, and students with scheduling conflicts often could not participate in these activities.

Over time, dual credit classes in New Mexico have increasingly become less common in high schools. In 2009-10, 42% of dual credit classes were taught at high schools, whereas in 2019-20, only 28% of DC classes were taught at high school sites.43 Some schools in the study that have helped bridge opportunity gaps offer numerous entry points to dual credit, WBL, and internships. Some offer virtual dual credit classes and online internships. In contrast, others provide dual credit, CTE, internships, and capstone experiences at the traditional high school sites or locate their campus near (or on) a postsecondary campus or an industry partner.
Aligned Program Example:
The New Mexico Work-Based Learning Initiative (WBLI) is a partnership between New Mexico’s Public Education Department and the Department of Workforce Solutions, business and industry stakeholders, and New Mexico employers committed to providing hands-on learning in a work environment. The WBLI is a school-to-career program where students receive career exploration guidance, learn work-ready skills, and take assessments in school that are aligned to the needs of employers in careers of their choice. Students are guided into work-based learning experiences to learn on-the-job skills that lead them to postsecondary institutions and eventually into a professional career. There are three overarching components to WBL; the alignment of classroom and workplace learning; the application of academic, technical, and employability skills in a work setting; and support from classroom or workplace mentors. Awarded funds may be used to pay a portion of a salary, curriculum development or purchase, outreach. The Mesaland Wind Energy program is an example of a WBLI. Region 9 Education Cooperative collaborates with Mesalands Community College to provide students with dual credit opportunities and real-world training experiences to become wind technicians after graduating high school. Wind energy training is available to students in Region 9 Education Cooperative’s member districts; Capitan, Carrizozo, Cloudcroft, Corona, Hondo, Ruidoso, and Tularosa school districts.
C. Providing Systems of Personalized Supports

**SPOTLIGHT: TRUMAN MIDDLE SCHOOL**

Located within Albuquerque Public School District, Truman implemented the AVID program in 2013 and is the only middle school in New Mexico designated as an AVID Demonstration School. Demonstration Schools implement AVID techniques for college readiness school-wide through their regular classroom teachers regardless of whether students are taking the AVID elective. Demonstration schools also undergo evaluation from the national organization. Teachers who received paid training educate the remaining teachers on AVID best practices. The program prepares students for college by teaching them organizational skills, study skills, and self-advocacy. Students learn note-taking, group study skills, critical thinking and reading skills, SAT prep work, and team-building skills. Students in the AVID class receive tutoring from Central New Mexico Community College (CNM) students twice a week and visit college campuses. The interviewee noted strong support from the principal ensures that staff implements the program school-wide. In addition, all feeder schools in Truman’s APS school zone (2) are AVID schools. Truman students matriculate to Atrisco Heritage Academy, where they continue tutoring services with college students twice a week and build additional college-readiness skills. Aligning programmatic efforts between the feeder schools has created a momentum that we also see in other districts that focus on developing collaborative feeder networks.

SCHOOL DATA: Enrollment- 1,036 students, 92% Hispanic, 3% Native American, 3% White non-Hispanic, and 2% or less are other races or ethnicities. 100% of students are ED, 28% ELL, 6% homeless, and 25% SWD. The school reports that a cohort of Truman’s prior AVID elective students who graduated from high schools in 2019 graduated at a rate of 100%. The high school graduation rate for the zoned high school (Atrisco Heritage) is 79%.
1. Building Social Capital for Students
Research indicates that low social capital is a barrier for low-income students, often first-generation students of color, to enroll and persist in college. In alignment with literature from the field, study participants named social capital as part of the critical support students need. WBL and experiential learning opportunities that build positive relationships with adults and potential employers offer students from marginalized and underserved communities a way to expand their social capital. Schools provided students with field trips to colleges, universities, and business sites. Additional promising practices included regularly bringing college tutors, college advisors, and local business members to the school campuses, amplifying a culture of college and career throughout the school culture, schedule, and language. Employees from the Pentagon and Spaceport America participated in a rural district’s high school virtual job fair. Students often focus their aspirations around what they see in their community. Exposing students, especially those from communities with significant opportunity gaps, to various careers and professionals from different backgrounds can help them develop social capital. Some schools leveraged their relationships with feeder schools. High school students visited middle and elementary schools to discuss their career and technical education experiences. An interviewee reported that having older students visit the schools helped young students identify with successful young adults who look like them and come from similar backgrounds.

2. Building Mentorship and Guidance
Schools providing school-based mentoring and individualized student advising provide students with smoother transitions between school levels and increased access to college and careers. Districts and schools use a variety of approaches to achieve this, some through classes and others by providing summer “crash courses” or camps. Some school sites in the study developed elective courses focused on learning college readiness skills or career exploration. Several early college high schools developed seminars for freshman cohorts to develop college-readiness skills and introduce students to topics aligned with their career goals. Districts and schools also developed summer camps and after-school programs for elementary and middle school students focused on STEM. These programs provide career exploration, mentorship, and guidance early. Some schools partner with nonprofit organizations to offer summer crash courses on college admissions and the financial aid process. The students get to work one-on-one with college admission officers, expert guidance counselors, and university professors and administrators.

Another example is a school that was an early adopter of college and career pathways that continues to be supported by the Southern Region Educational Board (SREB). They helped design the “Cultural and Linguistically Responsive Framework (CLR),” required by the PED in June 2020. They also leveraged the framework to demonstrate how a school’s mentorship and guidance structure is fully integrated and responds to each student’s development.

3. Mitigating Transportation Barriers
Transportation difficulties were a recurring theme throughout the study and are a common barrier experienced by schools across the country. Participant schools struggled to provide transportation for students participating in dual credit programs, internships programs, and work-based learning sites. Some districts experimented with providing free transportation via public transport, which proved challenging in rural and remote communities. Consequently, several schools opted to create on-site dual credit and
internships, virtual college and career fairs, and internships. Additionally, one participant school plans to co-locate the school campus with a local business partner to provide adequate space for WBL, internships, job-shadowing, and student employment opportunities.

4. Supporting Dynamic Professional Development
The advisory group and school sites identified funding for professional development, teachers’ lack of credentials in high-need content areas, and weak relationships with postsecondary institutions as significant limitations to successfully implementing college and career pathways.

Professional development costs can quickly become a barrier for many schools and districts. Although districts can use Perkins V, ESSA, and WIOA, and America Rescue Plan’s Elementary and Secondary School Emergency Relief (ESSER) Funds for professional development related to work-based learning instruction, several interviewees mentioned relying on annual district funds to support professional development. Interviewees said funding often runs thin. In addition, schools noted that teachers lack the extra time for professional development and are underpaid, so there is little incentive to participate. Sufficient funding can encourage participation but creating a school culture of college and career readiness is equally important. Schools with available funding combined professional development with clear expectations of all school staff for team teaching, integrated content, and social-emotional student support. These expectations were tied to school culture, not just a program or a grant.

Schools used creative means to tackle this obstacle. Some schools relied on rotating teachers through paid training programs. In contrast, others experimented with paying teachers to participate in professional development. In collaboration with a workforce nonprofit organization and local utility company, one school district developed teacher “externships.” Teachers were paid to participate in the externships, providing onsite, real-world experiences that connect classroom instruction to students’ future careers. The training provided teachers with in-depth knowledge of the field. It also supported teachers’ ability to deliver instruction that most closely mirrors the workforce skills students will need for success in their chosen field.
Aligned Program Example

The mission of College Horizons is to encourage and facilitate the higher education of Native American young people by providing college access, college retention, and pre-graduate programs. In 2019, College Horizons began as a collaboration with Bernalillo Public Schools and the 7 Pueblos of Cochiti: Santo Domingo, San Felipe, Santa Ana, Sandia, Zia, and Jemez on a 3.2 million dollar, 4-year federal grant to help the Bernalillo Public Schools establish a Student Success Program. The program aims to develop a culturally responsive college and career readiness program for 7th-12th grade students aligned with Pueblo core values, community, culture, and career needs to prepare Pueblo graduates to enter the local workforce or higher education.

Work outcomes include:

- Providing a college/career/culture curriculum for counselors, students, parents, and Tribal Education Departments.
- Increasing parent engagement.
- Providing individualized advising through a 100:1 student/counselor ratio.
- Providing summer internships for school students to gain workforce skills and explore jobs/careers.

College Horizons’ pre-college program is held on a college/university campus for one week over the summer. The individualized program helps students prepare for college through test preparation, navigating the college application process, and teaching strategies to become resilient and successful Native students in college. Two additional programs, the Scholars Program and the Graduate Program aim to increase the number of Native American students who obtain graduate, professional degrees, and PhDs. In 2014, College Horizons reported that they served over 3,400 Native students, 85% of whom had graduated college within 4-6 years and attended over 700 colleges and universities nationwide. Of those completing their bachelor’s degree, 715 alumni (21%) earned a master’s, professional, or doctoral degree. Additionally, they partnered with 75 colleges across the country, including highly selective institutions, where 35% of Horizon’s students enroll.52
D. Ensuring Culturally and Linguistically Responsive Programs

SPOTLIGHT: NATIVE AMERICAN COMMUNITY ACADEMY
The Native American Community Academy (NACA), a public charter school in Albuquerque, was founded in 2006 with the vision of creating a thriving and dynamic community where students, educators, families, and Native community leaders come together to create a place for students to grow, become leaders, and prepare to excel in both college and life. The college and career preparation program began in 2010 with the first class of 11th graders to develop college-based skills during class sessions and participate in dual-credit and work-based learning/internship opportunities throughout the year. Over the past decade, the program has expanded to create a comprehensive support network for NACAs high school students. Individualized student guidance and career counseling, strong local business connections, strong communication, and numerous experiential learning opportunities are some of the keys to NACAs success. Their college and career readiness team initiates and manages these approaches, which consists of three staff members dedicated to creating positive pathways for students. The staff helps guide and support each student in their college and career goals which are adjusted and focused on an ongoing basis.

NACA’s primary goal is college matriculation; however, the team recognizes the importance of experiential and work-based learning in each student’s journey. Additionally, NACAs permanent relocation to the CNM Campus and their former location at the UNM Law School reinforces the focus on college pathways for students daily. What NACA has demonstrated is the importance of creating strong instructional supports that complement the college and career readiness strategies. Their clear and consistent messaging and communication with parents, community, and stakeholders, both in-person and online, helps build trust and promote a culture of Indigenous holistic health and well-being reflected in NACAs low drop-out rates, high graduation rates, and college enrollment. In 2016, the school reported a 100% college acceptance rate for NACA seniors and an 83% college enrollment rate, four times the national average for Native American students.

In 2016, the school reported a 100% college acceptance rate for NACA seniors and an 83% college enrollment rate, four times the national average for Native American students.53

SCHOOL DATA54 Enrollment: 463 students (K-12), 78% Native American, 14% Hispanic, 6% multiracial, and 2% or less are other races or ethnicities. 100% of students are ED, 18% ELL, 9% homeless, and 19% SWD. 4-year Graduation Rate (2020):55 79% overall, 81% Native American (compared to 72% in LEAs statewide), 77% ELL, 82% ED, 91% SWD.
1. Centering Students’ Cultures and Languages
Participant schools that demonstrated progress toward providing culturally and linguistically responsive (CLR) college and career programming took one of two approaches; the entire school was built on a core mission to provide high-quality educational experiences to students, or the school leveraged a recently developed CLR framework to transform the school and programmatic approaches. In either approach, the most successful practices anchored cultural and linguistic responsiveness as a core function rather than a compliance activity due to the Martinez/Yazzie court ruling. The examples from participants intentionally embed holistic and culturally relevant supports, community and family engagement, language revitalization, and local community contexts through all school operations and programming.

2. Identifying and Changing Systemic Barriers
Inequitable access to college and career programs for marginalized students compared to their peers is not uncommon on a national level nor a state or local level. Data used for this study revealed many inequities in access to college and career programs, particularly for SWD, ED, and Native American students. Structural and policy-related barriers often prevent students from participating in essential academic opportunities in advanced courses. These barriers may include a class prerequisite and GPA requirements for advanced placement and CTE dual credit classes. A participant school identified such requirements as a systemic barrier and tackled it. The school intentionally does not place any prerequisites to participating in Advanced Placement, Honors, or CTE courses. This is contrary to many schools’ practices. Many schools require a B or better or course prerequisites creating barriers for students who have faced academic challenges and those impacted by structural opportunity gaps. Researchers have begun calling on states to rethink their policies surrounding entrance requirements for advanced classes, like dual enrollment (allowing students to be enrolled in both institutions, rather obtaining dual credit for single courses) and expanding access to college programming. These include opportunities targeted to students who are the least advanced academically.\(^{56}\)

3. Committing to Equity-Focused Expectations
Programs that undergo evaluation processes regularly (like AVID Demonstration schools or schools implementing Southern Regional Education Board’s [SREB] High School That Work) appear to adhere to the fidelity of comprehensive approaches. Schools commit to a rigorous validation process every few years to ensure high quality, fidelity, and equity in programmatic implementation. Participants pointed to these evaluation and review processes that provided constructive feedback about improving equity and program delivery opportunities. The non-governmental organizations that participants mentioned provide both constructive feedback and the consistent support needed to enhance the implementation of college and career programming for all students.
Aligned Program Example
The NACA (Native American Community Academy) Inspired Schools Network (NISIN) has taken the model and lessons learned from NACA and expanded into a multiple-school network. The approach integrates college-preparatory education with Indigenous philosophies and traditions through a culturally responsive curriculum that values personal wellness, cultural identity, and academic preparation. NISN supports ten affiliated schools in New Mexico to develop a rigorous academic curriculum for college preparation while promoting Indigenous culture, identity, and community investment.

NISN schools have Community Advisory Councils who help plan and develop the school’s curriculum and programs, including Wellness Philosophy, Curriculum Development, Governance Council, Family Outreach, and Out of School Time/Community Partnerships. Community members participate in school leadership and organization. Schools also serve as a hub for robust community partnerships that support the success of students and families. Other NISN schools include NACA Elementary, Dream Dine, DEAP, The Six Directions Indigenous School, Kha’p’o Community School, and Raíces del Saber Xinachtli Community School. NISN also offers a Post-Baccalaureate Teacher Training Program called “Growing Educators for Native American Communities (GENAC).” The program aims to increase the number of highly qualified teachers to deliver culturally integrated education in hard-to-staff areas. As a result, thirty educators now serve in schools in Native Communities.
Systemic change requires a complete paradigm shift in the way education agencies and schools approach college and career preparation and ultimately how students are supported throughout their time in the education system, from kindergarten through higher education. The following recommendations emerged from existing knowledge, research in best practices, data from secondary sources, qualitative and quantitative data from the advisory committee, and interviews with school sites as articulated in the Promising Practices section above. Effectiveness, efficiency, and equity served as guiding principles for creating these recommendations, which were vetted with several key stakeholder partners. The vetting process allowed the team to understand stakeholders’ high level of willingness and interest to work collaboratively on comprehensive college and career pathways.

There was unanimous agreement among participants that our system needs to improve the preparation of students for college, career, and life. Participants generally agreed with taking a comprehensive approach to college and career pathways. Still, they questioned whether this was happening on a large scale effectively, efficiently, and equitably for all students. Moreover, their concerns surrounded the state, school districts, and schools’ implementation of college and career pathways within structural constraints, such as lack of funding, personnel capacity, programmatic requirements, and logistical issues.

V. Recommendations
In light of this, these recommendations hold students at the center and are grounded in four interrelated pillars: equity, integration, relationship, and responsibility.

**Equity:** The fundamental guiding principle for the research and the recommendations is to create equitable systems that repair the historical marginalization of students and communities, namely Native students, ELL, SWD, and low-income, as were highlighted in the Martinez/Yazzie case.

**Integration:** The recommendations must be integrated into the culture of each school and the community and should be inextricably aligned with the curriculum and student achievement goals.

**Relationship:** The recommendations include student voice and building relationships between individuals and the community rather than a top-down structure, as this will support long-term change.

**Responsibility:** Rather than focus on accountability with potentially negative connotations, responsibility focuses on each student’s assets and long-term care.

The research team has outlined the recommendations at the local (district, school, and community) level and a tribal/statewide level through policy and funding. The team intentionally incorporated Native American and rural issues as part of the totality of the recommendations. Based on many of the conversations, the research team believes the local-level actions will be successful in the short term. Still, it is unlikely the change will be sustainable once the funds expire without tribal/state-level action. For a long-term systemic change, larger actions are necessary to create the conditions for promising practices in the field to thrive on an extensive scale. Therefore, the tribal/state-level recommendations are actions tribal governments, state government, and other authoritative entities must take to support systemic change as a facet of a sustainable culture of success based on local and community values.

The team offers a suggested 4-year pilot project that connects these two levels of implementation and provides actionable steps that schools and districts can take up, reflected in the attached draft Request for Application (RFA). These local-level actions built upon individual (school-based) models’ success can be directly implemented and evaluated through the pilot project resources. The pilot is one mechanism to support scaling the promising local practices. Still, as cautioned by study participants, such short-term and siloed approaches will likely be unsuccessful if they are not connected to broader, systemic change. Regardless, they have the potential for expansion, scaling, and sustainability.

The recommendations begin with planning and are organized and aligned according to stakeholder’s efforts to create comprehensive pathways to prepare students for college and career through their work to:

- align CTE with core academics,
- connect classroom instruction to WBL experiences
- provide systems of personal support, and
- ensure culturally and linguistically responsive programs.

Furthermore, these recommendations are ordered by importance. The research team recommends that stakeholders implement these actions in their totality and must have dedicated support, personnel, and resources beyond the current levels.
A. Local Level Actions

1. Collective Planning

The focus of the local-level actions for a redesign begins with planning. Planning allows for the actualization and operationalization of the recommendations. As the research team highlighted, schools that build their programs, systems, and practices through an organic and collaborative process see more positive outcomes for students and the community. A collaborative process places students, family, and the community’s voice at the center of the design. Although there should be flexibility in the planning and implementation, fidelity to the process is critical. In this case, fidelity means the plan builds on school and community collaboration and mutual expertise as foundations for successful implementation. It must centralize equitable relationships, accountability and generate positive outcomes for students.

a. Pathways Map and Plan

The National Center for College and Career Transitions defines a pathways program as:

A program of interconnected academic and elective classes revolving around a career or subject theme. It is integrated with experiential learning and close connections between secondary and postsecondary education, training, and apprenticeship. The program is designed to support the development of Career and Life Readiness for the learner so that the individual can successfully enter and advance in a career path.57

Schools demonstrating success have college and career readiness as a part of their overall school mission (for example, early college high schools, NACA, and Leadership Schools). Others have a separate mission or vision as part of their college and career preparation programming. Sometimes this is illustrated and communicated through pathways course mapping (as seen in Gadsden High School and local colleges and universities). Schools should develop a local college and career pathway map and unique implementation plan that clearly illustrates the pathways to college and career for students beginning no later than freshman year.

The plan should be developed collaboratively with multiple stakeholders to build and maintain trust, encourage accountability, and support college and career programming awareness. The stakeholders should include at least six members:

• A school counselor
• A teacher
• A local business representative
• A higher education representative
• A student and a parent/guardian or caregiver

Each plan will begin with an equity-focused mission/vision and college and career pathways objectives. The plans should contain the recommendations to follow and how the school or district will operationalize those action steps. While the research team is aware that schools are required to develop several action plans, the hope is that schools will build these pathways maps into their overall strategic plans and utilize these methods to invigorate their school and business communities for student success.
2. **Align CTE with Core Academics**
   
a. **Integrate CTE into the Curriculum and Redesign Schedules**
   There needs to be greater intentionality in integrating CTE with core academics to increase the number of college and career pathway opportunities. Instructors teaching core academic classes could collaborate with CTE instructors to include a CTE component into the course. Another approach could be adding a CTE course or college/career experience (like WBL) to the sequence of classes a student needs in a given subject area. For example, besides the required math courses, a CTE course (or WBL) in which math is a substantial component could be required.

   Similar to the researchers’ findings, districts nationally have identified inflexible scheduling as a barrier to participation in CCR activities. Schools should engage in a schedule redesign to allow for CCR activities (dual credit courses, internships, and other WBL activities). Creative use of block scheduling could increase opportunities for students to participate in internships and other WBL programs and create more planning time for teachers. Organizing schedules so that teachers share a mutual planning period allows structured time for teachers to develop project-based, team teaching across content areas integrating CTE and core academics. Block scheduling also could enable students to engage with course sequences that integrate CTE, dual credit, WBL and include an internship or capstone course. A notable national example of creating more flexibility is Butler Tech’s “Fifth Day Experience.” Instead of holding classes on Fridays, students participate in CTE or WBL experiences.

b. **Develop Community-Based Measures of Success**
   In addition to external metrics, schools and districts should develop their metrics and data collection methods based on community stakeholder input and engagement. Processes, such as Graduate Profiles, allow for strong stakeholder input and local accountability in creating a dynamic and representative citizenry with the attributes, skills, and knowledge needed to excel in college, career, and life. The approach should prioritize the local and community needs and reinforce the relationship between PED, DWS, HED, and the local institutions in supporting the community- and student-centered educational efforts.

3. **Connect Instruction with Work-Based and Experiential Learning**
   a. **Create On-Campus, Virtual, and Summer Internships**
   Schools and districts should develop a suite of internship options that provide various modes of en-
gagement. Virtual and summer internship opportunities that offer wages for students with well-trained employers are high-impact, structured WBL opportunities. Although there are many opportunities for off-campus internships, schools should provide school-based internships to allow more students to take on work roles in their schools, especially for those students who have barriers to reliable transportation. These internships could draw upon the skills and capacity of teachers and align with entrepreneurial efforts and opportunities throughout the state. In addition, when most students are not in school, developing and funding internships in the summer allows families who lack adequate transportation during the school year more flexibility and keeps young people engaged in high-quality experiences.

b. Develop a Campus Lab Initiative
Schools across the state need facility and equipment additions and upgrades to school campuses to provide on-site, work-based learning experiences. As the federal recovery and infrastructure funds continue to flow into communities, districts and schools should integrate student learning opportunities into capital outlay projects. CNM used a similar approach to campus improvement and expansion projects through the CNM Campus as a Living Lab initiative. The initiative engaged students in CTE courses for hands-on experiences in the campus upgrades. Students worked alongside technical professionals to conduct upgrades. Liberal arts and business instructors designed learning experiences for students that connected lessons to the campus upgrades (i.e., English course topics, procurement contracts updates, etc.).

4. Provide Systems of Personalized Supports
a. Establish School-Based Pathway Teams
Pathway Teams will provide guidance and local expertise to PED, collect and submit data, and create strong support networks for students. The Team will include at least six members: a school counselor, a teacher, a local business representative, a higher education representative, a student, and a parent/guardian or caregiver and could be the continuation of the mapping team. Team support will allow counselors the flexibility to focus on college and career while working collaboratively with teachers and social workers to support students. The Pathways Team structure will also help the school separate the job duties of counselors to effectively provide socio-emotional support and college and career counseling for all students. The creation of the Pathways Team will have the added benefit of freeing up the capacity of school-based social workers to anchor wrap-around supports and resources to better support ELL, SWD, first-generation, and low-income students. One interviewee indicated several low-income students at their early college high school struggled with school attendance because they needed to stay home and care for younger siblings, significantly impacting outcomes in an accelerated academic environment. The Pathways Team could help identify wrap-around supports that address these types of needs. Resources should include tutoring and social-emotional support such as mentors, counselors, and social workers.

b. Formalize Higher Education Partnerships
Schools and districts should develop formal partnerships around college and career pathways efforts. Higher education institutions have established strong career, internship, and employment programming that supports student work-based and experiential learning opportunities, including campus employment, paid internships for course credit, and national service. The state should facilitate these formal partnerships and agreements for every high school. The partnerships should include collaboration on dual credit and CTE course offerings, college and career exploration and blended advisement, WBL and internship opportunities, local employer partnerships, and mentoring. There is also an opportunity to engage
teacher preparation programs in the design and facilitation of these partnerships beyond recruitment- and enrollment-based relationships. These partnerships’ clear roles and responsibilities will provide a working platform for sustainability and broaden pathways for college and career engagement and success. These partnerships will also help leverage funds and resources to connect directly with postsecondary institutions to support comprehensive pathways.

5. Ensure Culturally and Linguistically Responsive Programs

a. Align Comprehensive Pathway Strategies to a CLR Framework

Implement culturally- and linguistically- responsive college and career pathway strategies that include a system of personal supports, early and ongoing outreach and communication, and equity-focused participation, completion, and outcomes data. These strategies should be grounded in holistic student needs and a part of both district and school-based short-term goals and long-term planning. Unfortunately, a common theme in the interviews was “we need students who want to participate in challenging programs,” implying that inequitable outcomes are due to a lack of will on behalf of students. Schools need to shift staff and student culture to the belief that even underperforming students can succeed in challenging programs like dual credit, early college high schools, and similar robust programming. Furthermore, they must develop strategies to support and encourage participation from underserved and historically marginalized students.

b. Conduct Ongoing Strategic Outreach

Early and ongoing outreach and communication regarding college and career options specifically address special populations’ needs, like ELL, SWD, and first-generation college-bound students. Adapting communication for these groups and their families can improve outcomes and should begin early in the school year and well before a student leaves school. Direct and collaborative communication should involve the student’s IEP team, family, and others, who are helping to develop an Individualized Plan for Employment (IPE). Communication materials and workshops tailored to these special populations and their families should be delivered ongoing throughout the students’ K-12 experience in tandem with the typical outreach for all students. For example, families of an ELL student may have questions regarding eligibility requirements for college entrance and financial aid based on their citizenship status. Families may want information regarding language services and accommodations in college. Ongoing communication and outreach from the Pathways Team can help provide necessary guidance and build stronger parent networks and community trust.
B. Tribal / State Level Actions

Although much can be accomplished at the local level, as previously stated, systemic change requires addressing how government entities can support local implementation, accountability, transparency, and ultimately student success. These recommendations are key opportunities to enable success at the district and school levels. However, they must be enacted statewide or governmental, including by tribal governments who may act on these recommendations under the tribal system itself.

The key pillars guide these actions for redesign, organized within four areas of opportunity: resources; structure; data and evaluation; and support and guidance. They are arranged in order of importance, with direct resources and a centralized support office being absolutely critical to the success of this work. These two areas - resources and personnel - were highlighted repeatedly in the research team interviews, with external educational partners, and from the research advisory group. The final two recommendations are necessary for a complete system revision but are not accomplishable without the first two - demonstrations of commitment by state and tribal governments to change the current system.

1. Direct Resources for Comprehensive Strategies

Throughout the conversations, stakeholders and educators highlighted the need for additional resources. Of course, there are always barriers to funding, and there is a need to balance effectiveness, efficiency, and equity in any educational initiative. However, it is essential to recognize that equity is expensive, especially when there has been decades of inequitable funding for historically marginalized communities. Moving forward, resources must be available (either allocated or redirected) and sustainable, as any initiatives will not be able to continue beyond the scope of a pilot or grant initiative without intentional long-term prioritization of college and career pathway strategies. As an educational leader outlined for the team-based on work in California, “Almost any district can do this for $500k or less annually (in fact, assuming that the requirement for a district leader can be met with existing staff, hiring a full-time work-based learning coordinator and a half-time data manager can probably be done for less than $250k).” The data from each promising practice support this: success has external funding to supplement state and federal funding. In other words, a holistic, creative, and dynamic approach to funding is a considerable key to success. This is not simply doing more with less; it is doing more with more and being given the flexibility to achieve results through a community-led strategy.

a. Build Regional Youth Employment and Opportunity Funds

Coordinate with the DWS and philanthropy to build youth employment and opportunity funds in partnership with the four regional workforce boards. The funds should draw contributions from the highest-need industry employers as part of their corporate accountability or discretionary funding sources to support integrated college and career pathways that result in local youth employment. The pooled funding should support: Regional CTE programming, College and Career Pathway Coordinator roles, paid internships and apprenticeships, employer training, and experiential learning opportunities. The fund will support the ongoing efforts of college and career readiness work by schools and districts throughout the state, especially when there are budgetary shortfalls or funding restrictions. Developing these public-private partnership funds among the state, the business sector, and philanthropic organizations will support the alignment of stakeholder interests and fund the implementation of a statewide system of high-quality college and career pathways.
b. Expand LEA WBL and Experiential Learning Budgets
Districts and schools need flexible funding beyond CTE. This funding would be used exclusively for comprehensive college and career pathways planning, programs, and initiatives. There should be local flexibility in using these dedicated funds which would be tied to rigorous expectations for programmatic fidelity and dedicated integration of all components for strong pathways. This funding could be used in concert with the regional funds to develop, maintain, and expand programs throughout the state.

c. Dedicated Funding for Transportation
Rural communities face continuous battles regarding transportation. Dedicated funding for college and business field trips should be allocated and amplified in rural district budgets. Principals and administrators should not struggle to find resources to pay for transportation that builds strong connections to local and regional businesses and higher education institutions.

d. Infrastructure Advocacy
Given the state’s rural nature, efforts must continue to focus on free or affordable broadband infrastructure for affected communities. The state should also recognize the need to be flexible with college and career pathways goals given the technological or infrastructural constraints and work with schools and districts to adapt requirements and provide guidance on supporting students through the pathways when technical barriers emerge. One option is to leverage ARPA to fund facilities, equipment, and campus improvements. These funds can be used to make space for on-site CTE, WBL, and dual credit programming and are necessary for infrastructural support, especially in areas with long-standing issues.

2. Increase Data Transparency and Evaluation Support
a. Support Equity-Focused Evaluation of all Pathways Programs
Conduct a comprehensive evaluation to identify systemic barriers to student participation in college and career pathways programs, including school recruitment strategies. This system evaluation should help create best-practices guides and establish standards enforced by PED. These should be robust and formative assessments that help schools and districts problem-solve and remove the stigmas of punitive, deficit-focused evaluations, as these kinds of approaches only lead to false data and avoidance. Although schools cannot implement quotas based on race or ethnicity, schools can better monitor enrollment with indicators correlated with race and ethnicity like income and first-generation status to ensure programs operate from an equity lens and sufficiently serve all populations. In addition, schools can establish
intentionally equitable recruitment strategies. For example, schools need to reevaluate entrance requirements for participation in ECHS or specialized schools by following lottery selections from the time of application instead of implementing lottery selection after students have been pre-sorted according to academic performance, interviews, or other measures and requirements. Lastly, there should be correction mechanisms for districts showing inequity in access, participation, and completion. Advance CTE provides tools and guides to address the negative aspects of CTE and address the equity gaps in CTE programming.

b. Create and Maintain an Online Portal
This portal would encourage data collection and public dissemination of findings at state and local levels to understand the effectiveness of programs and whether they are meeting their equity goals. The portal would feature a dashboard for educators, parents, community, and business stakeholders regarding local and statewide efforts. Data surrounding college- and career-readiness outcomes for students in New Mexico is not widely available, and when it is, it rarely follows best practices to measure equity. The state CCR indicator is an aggregate measure identifying students by demographic who have participated and succeeded in CCR activities that are integrated into the graduation requirements. While these activities are important, the CCR indicator does not add much value to understanding students’ college and career success. The CCR measure does not publically provide activity participation by group, the year of participation, or how “success” is defined. Neither does the measure identify any outcomes. In addition to outcomes data, the data should inform equitable access to CCR such as pass rates on AP tests and IB tests, dual credit completion rates, work-based learning opportunities, and industry-recognized credentials—the denominator for each measure should be based on all students and not just the students enrolled in these courses. This would provide a broader understanding of overall access and success. The portal should be guided by best practices of user experience/user interface (UX/UI). It should also meet the needs of multiple stakeholders, including parents and community members who could use a single, consolidated site.

3. Streamline Government Structures
During the data collection process for this project, what was made entirely clear was the need for a centralized support system that could help with program coordination, troubleshooting, policy advocacy, community engagement, data collection, and communications. It was also clear that these recommendations should not further stretch schools and school-based personnel. We recommend the following modifications to government structures.

a. Create a Centralized State Coordination Office for College and Career Pathways
Any efforts to develop a cohesive system for comprehensive college and career pathways must be accompanied by a dedicated office with dedicated personnel that works at the intersection of PED, HED, DWS, and Tribal governments, including a Director and Coordinator of a P-20 Alignment Team. The team should consist of members from all agencies to create a comprehensive college and career pathways system throughout the education continuum, resulting in college enrollment, credential attainment, and youth employment (ages 16-25). The state-level approach to a P-20 spectrum will create a through-line for students. A Native American Readiness Specialist would also be a valuable asset in helping to coordinate the various efforts and recommendations, tribal collaboration and consultation, disburse and provide oversight for available funds, consolidate data, and develop outreach materials for school-based program-
matic efforts. This office would develop reciprocal and sustainable relationships with partner schools and the New Mexico education system. Creating this office is a significant undertaking, and resources must be dedicated solely for this purpose, including ancillary staffing and infrastructure, not simply as a Project Management position. This office should build and manage the following two key efforts:

**P-20 Alignment Team Role**
The P-20 Alignment Team should coordinate all components of comprehensive pathways at the state level to present one consistent voice and expectation for districts and schools. This work must also include the alignment of dual credit courses between college campuses and high schools. The team should examine entrance requirements to prevent disqualifying students based on GPAs or test scores alone, a common barrier for marginalized students. The PED, HED, and DWS should take a more active role in facilitating effective partnerships. Allow LEAs more flexibility with partnerships (if classes are not available in the regional college, encourage partnerships with other universities and colleges across the state and region). Develop cohorts for dual credit students, work-based learning, and internship sites. In addition, finance transportation for the cohorts of students to attend dual credit classes, internships, and sites. Offer more online dual credit classes and virtual internships and virtual job shadowing to close the opportunity gap for rural and low-income students. Finally, this team can serve as a community of practice to inspire and support an “every student rises” approach to comprehensive college and career pathways.

**Create a Youth Pathways Council**
Youth voice is most often missing in governance and policy decision-making. It is critical to elevate youth voices for these efforts to be sustainable and equitable. A Youth Pathways Council would not simply exist as a token entity but would be integral to the planning, development, and implementation of recommendations and should be considered a paid internship opportunity offered by the state. Youth engagement will provide insights into needs and solutions from the proximate population most impacted by this work. Therefore, the Youth Pathways Council should reflect the demographics of high school students in New Mexico, particularly considering the populations addressed in the Martinez/Yazzie case. The Council should match the proportion of students according to race and ethnicity, disability status, socioeconomic status, and proportions of ELL students. The Council will also be responsible for creating a statewide Navigator Program. Working with HED and local institutions, the Council will help recruit and coordinate a Regional Navigator Cohort of college students who will assist local schools and districts in supporting college and career pathways. The Council will also create a Youth Navigator Summer Program where selected middle school, high school, and college students will learn and develop skills to become local and regional peer mentors and peer navigators.

**b. Cultural Career Pathways**
Like the heritage language accreditation process, tribal communities should have the authority to create their college and career pathways that align with community needs and cultural values. Working with Tribal Leadership to develop such pathways, including Cultural Career pathways, will allow Native American students the opportunity to gain work skills related to important careers in tribal communities (e.g., language, arts, and farming). It will also help prepare students for tribal leadership positions and administrative and business-related positions within their home communities and have those skills and experienc-
es recognized by the state. The Cultural Careers Pathway must be developed in collaboration and consultation with Pueblos, Tribes, Nations, and PED and could extend to Native American students in non-tribal education systems.

4. **Provide Targeted Support and Guidance**

Districts and schools need strong and consistent professional support to transform and redesign schooling. Clear guidance, coupled with consistent training and a facilitated community of practice, will be necessary for long-term sustainability. We recommend several approaches that would be useful to schools as they embark on systemic changes that deliver students comprehensive college and career pathways.

**a. Provide Administrative Training for Sustained Change**

Administrative commitment to effective college and career strategies is key to long-term success. School boards and school administrators will benefit from targeted training on:

1. How to maximize budgets to support college and career pathway opportunities.
2. How to restructure school days to meet students’ college and experiential career needs.
3. How to leverage equity-focused data to improve student outcomes

**b. Develop an Equity Training Program and Expand Professional Development**

The program will feature a curriculum that will help train staff (administrators and teachers) on best practices from an equity lens, including culturally responsive teaching practices/training for teachers and administrators implementing college and career-focused programming. A simple addition to professional development will include college and career readiness training (teaching students self-advocacy, note-taking, test-taking, soft-skills development, and other college and career readiness skills) for all teachers at every level of education. The professional development should be tailored to each grade level and feature assessment tools for teachers to provide students with consistent feedback that supports their growth.

**c. Incentivize Training and Recruitment of Bilingual and Special Education Teachers**

Funding should be utilized to recruit more teachers into the ECHS, CTE courses, dual credit classes, and other college and career readiness programs that focus on equity and marginalized communities.
d. Host a State/Local Business and Education Summit

Rather than singular meetings, the proposed Centralized State Coordination Office should host a bi-annual CCR Summit that will feature conversations, planning, and networking opportunities between educators, community members, tribal leaders, business leaders, and various additional stakeholders. The goal will be to develop relationships between sectors and break down the silos and barriers to allow for broad partnerships and deeper collaborations for student postsecondary and career success. The Summit will aim to draft a recommendation paper and action plan for state agencies based on the conversations and engagements throughout the Summit.

5. Create Pilot Program

The research team recommends that the PED implement a 4-year pilot program informed by promising practices from New Mexico to facilitate the expansion of comprehensive college and career pathways. The pilot program would be a competitive grant available to New Mexico public school districts, local-charter or state-chartered schools, BIE-funded schools (including Tribally-controlled schools), institutions of higher education (including tribal and community colleges), and regional educational cooperatives to:

1) Create alignment of CTE with core academics by leveraging the revised graduation requirements to redesign schedules, using a Graduate Profile process to identify attributes, skills, and knowledge for student success and school data to ensure equitable access and outcomes.

2) Connect instruction with work-based and experiential learning through the development of a suite of internship opportunities, including school-based, paid, virtual, and summer internships, project-based approaches, and course sequences. The course sequences must be aligned across the curriculum, including a capstone course and a holistic assessment of skills, attributes, and knowledge.

3) Establish a school-based pathways team of at least six members, a school counselor, a teacher, a local business representative, a higher education representative, a parent or guardian, and a student to guide comprehensive college and career pathways planning, implementation, improvement, and sustainability.

4) Implement culturally- and linguistically-responsive college and career pathway strategies that include a system of personal supports, early and ongoing outreach and communication, and equity-focused participation, completion, and outcomes measures.

5) Engage in ongoing learning and a statewide community of practice to improve practices, share what works, and inform how to scale comprehensive college and career pathways in New Mexico.

The pilot program creates the opportunity for schools districts, schools, and communities to work closely with the PED and tribes to design, implement and assess comprehensive approaches. The pilot allows PED to use learnings from ongoing implementation to create a long-term, statewide plan to scale comprehensive college and career pathways in a way that respects tribal and local context and leadership.
VI. Conclusion

As one advisory team member stated, “We know what needs to be done.” The question is: do we have the energy and vision to actualize what our students are surely capable of? Systemic change requires innovative and deliberate action. These findings and recommendations are a summary of community success and community knowledge. However, the default is too often to say there “aren’t enough resources” or “that has already been tried.” Worse still is to continue in the same direction that has failed many of New Mexico’s students and limited so many possibilities for talented and capable young people. As one educator put it, “the data [is] stark, and it’s an indicator of the whole career education world. We’ve found that its main function is to rank and sort students rather than give them opportunities. It’s an immense problem for our state. As a result, we are missing out on a wealth of talent from students who are capable of making a contribution.”

What we know for sure is that Martinez/Yazzie highlighted this indisputable fact: that the system, itself, failed overwhelming generations of students, and it will require determination and deliberate action, intentional practices and willpower, and support and advocacy beyond what we’ve seen for the past decades to ensure a system that is equitable and responsible for all students throughout the State of New Mexico. In essence, we cannot shuffle the cards and hope for a better deal; we must call for a new game, one that builds on our communities’ wealth and does not seek to further marginalize their potential.
APPENDIX A

Additional Models and Approaches

High Schools that Work (HSTW)/ Middle Schools That Work (MSTW)
The HSTW approach brings teachers, counselors, school leaders, and industry partners together to focus on engaging instruction, aligned curriculum, career pathways, support systems, and leadership for continuous improvement. The HSTW-recommended curriculum calls for a challenging program of study with these two components: an academic core of courses and CTE/ career pathways that culminate in attaining recognized industry or post-secondary credentials. HSTW emphasizes project and problem-based learning and connects the classroom and the workplace through work-based education. HSTW has employed elements of the Linked Learning approach. Linked Learning blurs the distinction between Career and Technical Education (CTE) and college preparation by creating a pathway toward a single goal: preparation to succeed in college and careers. Schools that participated in HSTW/MSTW include Carlos F. Vigil Middle School (Espanola Public School District), Sierra Middle School (RISD), and Gadsden High School. Districts: Las Cruces Public Schools, Roswell Independent Schools, Taos Municipal Schools, Española, Media Arts Collaborative. According to the Legislative Education Study Committee, the PED no longer allocates Perkins’s money to HSTW because it was not yielding “desired results.”

Next Gen CTE Pilot
The Next Gen CTE Pilot supports Local Educational Agencies (LEAs) in the cost of 1) CTE programs of study that lead to an industry credential, a technical Associates Degree, or a STEM Bachelor’s Degree. (Programs that align to Bachelor of Arts degree plans in general studies, humanities, or liberal arts are not fundable) or 2) CTE-related support. Programs of study must include, at minimum, two high school CTE courses plus an aligned capstone course. A capstone may be dual credit, Advanced Placement, a credentialing course, or credit-bearing work-based learning. CTE-related support includes employability skills development and CTSO advisor stipends; integration of mathematics into CTE courses (including online support for the integration of algebra and geometry); guided career exploration activities for students; CTE dual credit credentialing for teachers; and work-based learning experiences that focus on basic employability skills and career readiness preparation. Funding may be used for salary support for a coordinator but may not be used for wage support of students.
High School Redesign Network
This model focuses on redesigning curricula, targeted professional development for teachers, and ongoing high-impact support around the planning, implementation, and monitoring of individualized, evidence-based redesign plans. The model focuses on four drivers of redesign; organizing adults (including teachers, administrators, and parents), professional development, keeping students at the center, and redesigning all students’ postsecondary pathways to focus on high school as a beginning, not an ending. The model also includes developing early warning systems and student career pathways. The HSRN targeted 10 Comprehensive Support and Improvement (CSI) schools: West Mesa (APS); Belen, Bernalillo; Cuba; Española Valley; Rocinante; Miyamura; Gilbert L Sena Charter; Health Leadership (APS); and Las Montanas Charter (Las Cruces) high schools.

Early College High Schools
ECHSs allow students to complete a regular high school diploma while simultaneously earning credits towards a college-level certificate, associate degree, or bachelor’s degree at the partner institution of higher education. There are three models:

- Freestanding model, where all students are enrolled in an ECHS pathway(s).
- An academy model, where only a subset of the students at a comprehensive high school are early high school students.
- The co-location model in which the ECHS is housed with a secondary institution.

Students in an ECHS undertake rigorous academics, meaningful work-based learning experiences that align with New Mexico’s economic sectors, and a Career and Technical Education (CTE) sequence (through the use of Career Clusters). Innovative, interactive, research-based support structures facilitate student success in an accelerated learning environment. ECHSs aim to serve low-income youth, first-generation college-goers, ELL, ethnically diverse students, and other students underrepresented in higher education. The proportion of low-income students in the ECHS at a minimum should match the rate of low-income students in the district’s high school population. There are 23 ECHSs in New Mexico within fourteen traditional public school districts and four public education commission charters.

In SY 2020-21, 3% (N = 3221) of the high school population was enrolled in an ECHS. Few studies have measured the impact of early college high schools in New Mexico, particularly for marginalized students. One analysis of two early college high schools in 2019 found significant positive effects for students related to postsecondary attainment. However, the evidence was correlational. Although students who attend ECHSs may have better outcomes, it did not show ECHSs cause better outcomes. The researchers noted that students who attend and complete ECHSs in New Mexico are less likely to come from traditionally disadvantaged backgrounds, a data point the research team in this study also identified.

Leadership Schools
The Leadership Schools Network is a project of Future Focused Education. Leadership Schools are project-based charter schools that aim to improve educational, career, and life outcomes for marginalized students, many of whom have dropped out or are at-risk of dropping out. Schools are student-centered and community-responsive, aligned to dynamic industries in New Mexico. The schools focus on six design principles: learning through doing; assessment through mastery of learning outcomes; deliberate collaboration with community and industry partners; positive youth development through socio-emotional learning; ongoing professional development of
teachers; and cross-school shared resources and capital. Students participate in internships and must complete a capstone project that investigates aspects of professions through real-life projects. Students will collaborate in teams to research, create, and publicly present on topics related to the industry. Private businesses pay for the internships; some will sponsor internships for the student to work in other companies. Currently, there are four Leadership Schools in New Mexico; ACE Leadership (Architecture, Construction, and Engineering); Siembra Leadership (the only entrepreneurship-focused high school in New Mexico); Health Leadership School; and the Technology Leadership High School.

**AVID (Advancement Via Individual Determination)**

AVID places academically average students in advanced classes; levels the playing field for minority, rural, low-income, and other students without a college-going tradition in their families; and targets students in the academic middle- B, C, and even D students—who have the desire to go to college and the willingness to work hard. Students participating in the AVID elective class have the opportunity to explore careers and colleges that fit their personalities, goals, and interests. AVID students become experts in Writing Inquiry, Collaboration, Organization, and Reading (WICOR) which helps them be successful in all of their classes and prepares them for college. AVID students access tutors weekly who guide students in group tutorials to help them in all their classes. In 2018, 65% of AVID participants in NM were on the free or reduced-price lunch program. The New Mexico Alliance for College and Career Readiness will be submitting a bill during the 55th New Mexico legislative session (January 22) asking for $3 million to advance college and career readiness for New Mexico students.

The program will:
- Provide training to over 2,700 teachers
- Impact 137,000 students (40% of New Mexico students)
- Provide remedies for the issues outlined in the Martinez/Yazzie lawsuit

AVID is often funded by Title I funds and other supplemental funds. For example, at Capital High School in Santa Fe, the Gear-Up program (another federally funded grant) helps fund the AVID program. AVID students receive academic support and college scholarships from several local private foundations. As of 2020, AVID was present at 96 sites (secondary and elementary) in 14 school districts. There are 2 AVID National Demonstration Schools: Capital High School (Santa Fe) and Truman Middle School (Albuquerque). An AVID demonstration school follows the AVID framework conceptually even if the student is not taking the AVID elective class. As of 2018, there were 84 AVID sites in New Mexico. Additionally, AVID seniors across the state had a 3.2 GPA, 80% applied to a 4-year college or university, and 75% were accepted.

**Blended Senior Year**

The Blended Senior Year model, a Bridge of Southern New Mexico project, was piloted in Santa Teresa High School (GISD) in 2020. The model turns the senior year of high school into the freshman year of college. Dual credit allows students to simultaneously complete their high school graduation requirements and earn college credits toward college degrees or career certifications. Thirty-four seniors participated in the pilot; of those students, 27 completed courses at Doña Ana Community College. Despite the pandemic, six completed certificates in Business Fundamentals, Computer Technology, or Creative Media, and six chose to take classes at NMSU and work towards a 4-year degree. In contrast, others continued their studies towards certificates. As of the end of Spring 2020, 6 out of 27 (22%) students earned a CTE certificate from DACC.
NM Regional Education Cooperatives (REC)
Funded by the Division of Vocational Rehabilitation (DVR) and the Commission For the Blind (CFB) through the Workforce Innovation and Opportunity Act, cooperatives provide students ages 14-22 with disabilities with training and transition services. Services provided include:

- Job Exploration Counseling
- Self-Advocacy Training
- Higher Learning Counseling (Postsecondary Education)
- Work Readiness Training
- Work-Based Learning Experiences
- Referrals to DVR, CFB, and other community resources

Jobs for America’s Graduates (JAG)
Job’s for America’s Graduates (JAG) is a graduation, life skills, and employment program that assists students at risk for dropping out of school to accomplish their academic and career goals and graduate from high school. According to PED, in FY16, JAG served 214 students in New Mexico in five school districts; Albuquerque Public Schools, Bernalillo Public Schools, Mora Independent Schools, Rio Rancho Public Schools, and Zuni Public Schools. Of the seniors in the program, 95% graduated. According to the Legislative Education Study Committee, the PED no longer allocates Perkins money to JAG because it is not “Perkins-aligned.”

Career and Technical Student Organizations (CTSO)
CTSOs help students obtain hands-on and real-world work experience. There are eight CTSOs in New Mexico:

- Business Professionals of America supports students pursuing careers in finance, business administration, management, information systems, digital communication, marketing, and other business-related fields.
- DECA prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality, and management in high schools and colleges around the globe.
- Educators Rising cultivates highly skilled educators by guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession.
- HOSA-Future Health Care Professionals is a national student organization recognized by the U.S. Department of Education and the Health Science Education Division of ACTE. HOSA’s two-fold mission is to promote career opportunities in the healthcare industry and enhance quality health care delivery.
- Family, Career, and Community Leaders of America (FCCLA) is a national student organization that helps youth develop leadership and workplace skills to prepare for college and careers. Students apply skills learned in the Family and Consumer Sciences (FCS) classroom.
- Future Farmers of America (FFA) is an intracurricular student organization for those interested in agriculture and leadership.
- SkillsUSA is a partnership of students, teachers, and industry representatives working together to ensure America has a skilled workforce.
- Technology Student Association (TSA) is a national student organization devoted exclusively to science, technology, engineering, and mathematics (STEM) students.
APPENDIX B - Project Advisors

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Endnotes


3 CCR Success Measure: https://newmexicoschools.com/state/999999/ccr; Statewide graduation rate in 2020. New Mexico Public Education Department

4 This includes students in tribally-controlled high schools.

5 A CTE participant is defined as a student who, within the reporting school year, attended grades 9, 10, 11 or 12 and participated in one or more CTE courses in an approved program of study. Sources: U.S. Department of Education, National Perkins Reporting System, 2020 and New Mexico Public Education Department STARS Report

6 This includes students in tribally-controlled high schools.

7 A CTE concentrator is defined as a grades 9-12 student completing two or more courses in an approved program of study. Sources: U.S. Department of Education, National Perkins Reporting System, 2020 and New Mexico Public Education Department STARS Report

8 New Mexico Public Education Department, The College and Career Readiness Bureau (CCRB) and PED Stars Enrollment Report


11 National Center for Educational Statistics, ELSi

12 Note: The exact number of high school students enrolled in BIE and tribally controlled schools is unknown. Source: https://webnew.ped.state.nm.us/wp-content/uploads/2021/01/TESR2020.pdf

13 https://careertech.org/resource/career-readiness-metrics-framework


15 https://www.acteonline.org/history-of-cte/

16 https://careertech.org/resource/series/making-good-promise


18 This includes students in tribally-controlled high schools.

19 A CTE participant is defined as a student who, within the reporting school year, attended grades 9, 10, 11 or 12 and participated in one or more CTE courses in an approved program of study. Sources: U.S. Department of Education, National Perkins Reporting System, 2020 and New Mexico Public Education Department STARS Report

20 This includes students in tribally-controlled high schools.

21 A CTE concentrator is defined as a grades 9-12 student completing two or more courses in an approved program of study. Sources: U.S. Department of Education, National Perkins Reporting System, 2020 and New Mexico Public Education Department STARS Report


23 https://webnew.ped.state.nm.us/bureaus/college-career-readiness/college-acceleration/dual-credit/

24 New Mexico Public Education Department, The College and Career Readiness Bureau (CCRB) and PED Stars Enrollment Report

25 New Mexico Public Education Department, The College and Career Readiness Bureau (CCRB)

26 https://nmlegis.gov/Entity/LFC/Documents/Program_Evaluation_Progress_Reports/progress%20report%20dual%20credit%20sep-
As evidenced by the development of the Multi-Layered System of Supports (MLSS) in 2018-19, culturally and linguistically responsive frameworks (2020?), the passing of the Community Schools Act (2013), and the increase in community schools statewide.

https://webnew.ped.state.nm.us/bureaus/community-schools/


As evidenced by the development of the Multi-Layered System of Supports (MLSS) in 2018-19, culturally and linguistically responsive frameworks (2020?), the passing of the Community Schools Act (2013), and the increase in community schools statewide.

https://webnew.ped.state.nm.us/bureaus/accountability/graduation/

https://cte.ed.gov/wbltoolkit/

39 Future Focused Education (FFE), an organization based in Albuquerque, 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. FFE worked with employers to strengthen and expand offerings through virtual internships through the pandemic. The paid internships are credited with keeping kids in school and engaged during COVID-19. Successful results are reflected in increased student participation and completion, positive student experiences, employer reviews, and post-graduation employment. Additionally, FFE provides support to the Leadership Schools Network in Albuquerque.

40 https://newmexicoschools.com/schools
41 https://newmexicoschools.com/schools
42 https://ccrc.tc.columbia.edu/media/k2/attachments/broadening-benefits-dual-enrollment-rp.pdf
44 https://cte.ed.gov/wbltoolkit/
45 https://www.rec9nm.org/Career-Technical-Education
46 https://newmexicoschools.com/schools
47 https://newmexicoschools.com/schools
48 Kayla J. Crawley, Christine T. Cheuk, Anam Mansoor, Stephanie M. Perez, Elizabeth Park
52 https://www.nmlegis.gov/handouts/IAC%20111919%20Item%2014%20College%20Horizons.pdf
54 https://newmexicoschools.com/schools
55 https://webnew.ped.state.nm.us/bureaus/accountability/graduation/
57 https://www.nc3t.com
60 https://fde.butlertech.org/#
61 Learn more about CNM’s Campus as a Living Lab Initiative: https://www.cnm.edu/news/faculty-and-staff-news/campus-as-a-living-lab-initiative-gains-momentum
62 Parents Involved in Community Schools v. Seattle School District No. 1
63 https://careeretech.org/resource/series/making-good-promise
64 Note: States with offices or initiatives similar to this include Missouri https://dhewd.mo.gov and Illinois https://p20network.niu.edu/participants/ , https://www2.illinois.gov/sites/P20/Pages/COMM2.aspx
66 https://www.echs-nm.com/equitable-access/
70 https://www.crecnm.org/PreEmployment-Transition-Services
72 https://webnew.ped.state.nm.us/bureaus/college-career-readiness/career-technical-education/high-schools-that-work/