



Bloomfield School District

Career Prep Program Development

Four Corners Regional Education Cooperative 1

**Executive Operational Plan: May, 2021-December, 2021
By: Jose Villarreal, Jr. | Work-Based Learning Consultant**

Table of Contents

I.	Bloomfield Schools - Career Prep Development - Executive Summary.....	3
II.	Research Current Bloomfield Schools - CTE Career Pathways, 9-12 th Grades.....	4
III.	Research Regional Career Interest Survey Results, Students 6-12 th Grades.....	4
IV.	Research Bloomfield Schools - CTE Labor Market Information (LMI) Workforce Region: Northern.....	4
V.	Research Four Corners Economic Development- Focus Group Report Summaries.....	8
VI.	Research New Mexico Public Education Department: College and Career Readiness Bureau- Region A Consortium Results (NOTES) from January 2020.....	12
VII.	Analysis/Proposal Industry Focus Group Summary Data Student Career Survey Data CTE LMI Data CCRB Consortia (Notes) Data.....	13
VIII.	Implementation Timeline Bloomfield Schools- CTE Career Pathways/WBL Program.....	14
IX.	Cost Analysis Bloomfield Schools- CTE Career Pathways/WBL Program.....	17
X.	Conclusion.....	18
XI.	Sources Cited.....	19

I. Bloomfield Schools - Career Prep Development - Executive Summary

What is a Career Pathway?

A Pathways Program is 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 internship or apprenticeship. The program is designed to support the development of college and career readiness for the learner, so that the individual can successfully enter and advance in a career path.

The Kellogg Foundations - Career Prep Development project is a comprehensive collection of qualitative and quantitative data including local and regional labor market trends, current Career and Technical Education (CTE) career pathways course sequences (Bloomfield Schools), local industry focus group interviews, and local student career interests. The collection of data was performed via internet, teleconference interview, and face-to-face interviews. The data ranges from local to regional to national sources.

Purpose:

The purpose of this project is to research and identify skills and employability gaps in the transition from education to the workforce, in addition to providing expert recommendations to enhance and/or redesign the current career pathways model at Bloomfield Schools.

This research project is outlined in the following format: current career pathways at Bloomfield Schools; career interest survey data from local middle and high school students; CTE Labor Market Information (LMI) data; local industry focus group interview summary data; NMPED consortium (notes) data from Region A; skills and employability gap analysis and proposals; career pathways at Bloomfield Schools implementation timeline; and finishes with the cost analysis to redesign the current pathways at Bloomfield Schools.

The researcher and project lead is Jose Villarreal. Mr. Villarreal is a former business owner and small business counselor. He researched and developed the innovative Work-Based Learning Program at Farmington Municipal Schools. The WBL Program's employer-driven model has had success at the local and statewide levels. In the summer of 2021, Mr. Villarreal partnered with NMPED's College and Career Readiness Bureau to launch the Summer Enrichment Internship Program, which provided over 2,300 paid internships to students in 24 counties of New Mexico. Mr. Villarreal's passion is to provide a career opportunity to all students across San Juan County and the state of New Mexico. He believes his Work-Based Learning model can serve as the bridge of the education to workforce gap for generations to come.

II. Research | Current Bloomfield Schools - CTE Career Pathways, 9-12th Grades

- Welding
- Intro and Advanced Carpentry
- Intro Culinary Arts
- Studio Art (Visual Arts)
- Computer Science
- Business
- Mechanical and Technical Drafting
- Choir

III. Research | Regional Career Interest Survey Results, Students 6-12th Grades

















Rank	Middle School / High School Career Pathways Data	Students	Percentage
#1	Arts, A/V, Technology & Communications	528	18.7%
#2	Health Science	501	17.8%
#3	Science, Technology, Engineering, Mathematics	272	9.6%
#4	Business Management & Administration	220	7.8%
#5	Architecture & Construction	214	7.6%
#6	Law, Public Safety, Corrections & Security	170	6.0%
#7	Agriculture, Food & Natural Resources	162	5.8%
#8	Human Services	162	5.8%
#9	Education & Training	131	4.7%
#10	Hospitality & Tourism	120	4.3%
#11	Information Technology	77	2.7%
#12	Marketing	63	2.2%
#13	Manufacturing	61	2.2%
#14	Government & Public Administration	51	1.8%
#15	Finance	51	1.8%
#16	Transportation, Distribution & Logistics	36	1.3%
	TOTAL	2819	100%

IV. Research | Bloomfield Schools - CTE Labor Market Information (LMI) Workforce Region: Northern

The Pathways 2 Careers (P2C) Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. The maps have been developed to align with the National Career Clusters Framework and rely on the O*NET job zone classification system to accurately assign occupations to job zones. Labor market data displayed in the cluster maps was collected from state and regional labor departments to reveal market demand and median wages for each occupation. In using these maps,

educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Career Cluster Map Data		
Data Category	Data Description	Potential Application
Occupations by Job Zone	<ul style="list-style-type: none"> Occupations listed by highest projected demand within each job zone 	<ul style="list-style-type: none"> Understanding Entry and Exit Points – Educators and students can identify employment opportunities that are highest in demand at various education levels. This can be used to encourage informed decisions about when to enter and exit education/training programs.
Annual Openings	<ul style="list-style-type: none"> Projected annual openings displayed for each occupation 	<ul style="list-style-type: none"> Evaluating Employment Opportunity – Occupations that are higher in annual openings offer more opportunity for students. Educational practices can be directed toward preparing students for occupations that are highest in demand.
Median Wage	<ul style="list-style-type: none"> Median wage data listed for each occupation 	<ul style="list-style-type: none"> Assessing Occupation Value – Data related to median wages can be used to determine which occupations offer the most value to students. Career readiness efforts can target high-value occupations with higher wages, as well as higher annual openings.

Career Clusters and Pathways					
Career Cluster	Career Pathway	Career Cluster	Career Pathway	Career Cluster	Career Pathway
 Agriculture, Food & Natural Resources	<ul style="list-style-type: none"> Agribusiness Systems Animal Systems Environmental Service Systems Food Products & Processing Systems Natural Resources Systems Plant Systems Power, Structural & Technical Systems 	 Government & Public Administration	<ul style="list-style-type: none"> Foreign Service Governance National Security Planning Public Management & Administration Regulation Revenue & Taxation 	 Law, Public Safety, Corrections & Security	<ul style="list-style-type: none"> Correction Services Emergency & Fire Management Services Law Enforcement Services Legal Services Security & Protective Services
 Architecture & Construction	<ul style="list-style-type: none"> Construction Design/Pre-Construction Maintenance/Operations 	 Health Science	<ul style="list-style-type: none"> Biotechnology Research & Development Diagnostic Services Health Informatics Support Services Therapeutic Services 	 Manufacturing	<ul style="list-style-type: none"> Health, Safety & Environmental Assurance Logistics & Inventory Control Maintenance, Installation & Repair Manufacturing Production Process Development Production Quality Assurance
 Arts, A/V Technology & Communications	<ul style="list-style-type: none"> A/V Technology & Film Journalism & Broadcasting Performing Arts Printing Technology Telecommunications Visual Arts 	 Hospitality & Tourism	<ul style="list-style-type: none"> Lodging Recreation, Amusements & Attractions Restaurants & Food/Beverage Services Travel & Tourism 	 Marketing	<ul style="list-style-type: none"> Marketing Communications Marketing Management Marketing Research Merchandising Professional Sales
 Business, Management & Administration	<ul style="list-style-type: none"> Administrative Support Business Information Management General Management Human Resources Management Operations Management 	 Human Services	<ul style="list-style-type: none"> Consumer Services Counseling & Mental Health Services Early Childhood Development & Services Family & Community Services Personal Care Services 	 Science, Technology, Engineering & Mathematics	<ul style="list-style-type: none"> Engineering & Technology Science & Mathematics
 Education & Training	<ul style="list-style-type: none"> Administration & Administrative Support Professional Support Services Teaching/Training 	 Information Technology	<ul style="list-style-type: none"> Information Support & Services Network Systems Programming & Software Development Web & Digital Communications 	 Transportation, Distribution & Logistics	<ul style="list-style-type: none"> Facility & Mobile Equipment Maintenance Health, Safety & Environmental Management Logistics Planning & Management Services Sales & Service Transportation Operations Transportation Systems/Infrastructure Planning, Management & Regulation Warehousing & Distribution Center Operations
 Finance	<ul style="list-style-type: none"> Accounting Banking Services Business Finance Insurance Securities & Investments 				



Career Cluster : Arts, Audio/Video Technology & Communications

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorage Degree
*	*	Audio and Video Equipment Technicians Annual Openings = 5 Median Wage = \$38,460	Graphic Designers Annual Openings = 19 Median Wage = \$43,600	*
*	*	*	Technical Writers Annual Openings = 11 Median Wage = \$82,980	*
*	*	*	Producers and Directors Annual Openings = 9 Median Wage = \$49,820	*
*	*	*	*	*
*	*	*	*	*



Career Cluster : Health Science

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorage Degree
*	*	Registered Nurses Annual Openings = 254 Median Wage = \$75,260	Recreational Therapists Annual Openings = 4 Median Wage = \$35,740	Medical and Health Services Managers Annual Openings = 46 Median Wage = \$105,880
*	*	Medical Assistants Annual Openings = 156 Median Wage = \$35,730	*	Nurse Practitioners Annual Openings = 28 Median Wage = \$116,430
*	*	Medical Secretaries Annual Openings = 154 Median Wage = \$36,620	*	Physical Therapists Annual Openings = 21 Median Wage = \$94,780
*	*	Dental Assistants Annual Openings = 90 Median Wage = \$38,050	*	Physician Assistants Annual Openings = 16 Median Wage = \$121,170
*	*	Licensed Practical and Licensed Vocational Nurs... Annual Openings = 53 Median Wage = \$46,800	*	Speech-Language Pathologists Annual Openings = 10 Median Wage = \$78,520



Career Cluster : Science, Technology, Engineering & Mathematics

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorage Degree
*	*	*	Environmental Scientists and Specialists, Inclu... Annual Openings = 78 Median Wage = \$72,330	Physicists Annual Openings = 145 Median Wage = \$179,850
*	*	*	Engineers, All Other Annual Openings = 41 Median Wage = \$132,700	Computer and Information Research Scientists Annual Openings = 45 Median Wage = \$136,830
*	*	*	Health and Safety Engineers, Except Mining Safe... Annual Openings = 16 Median Wage = \$143,780	Physical Scientists, All Other Annual Openings = 45 Median Wage = \$131,630
*	*	*	Life, Physical, and Social Science Technicians,... Annual Openings = 11 Median Wage = \$43,250	Architectural and Engineering Managers Annual Openings = 20 Median Wage = \$150,450
*	*	*	Geoscientists, Except Hydrologists and Geograph... Annual Openings = 10 Median Wage = \$67,860	Anthropologists and Archeologists Annual Openings = 11 Median Wage = \$59,950



Career Cluster : Business Management & Administration

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorage Degree
*	Information and Record Clerks, All Other Annual Openings = 22 Median Wage = \$38,930	*	General and Operations Managers Annual Openings = 343 Median Wage = \$89,090	Management Analysts Annual Openings = 117 Median Wage = \$64,370
*	*	*	Business Operations Specialists, All Other Annual Openings = 165 Median Wage = \$75,470	*
*	*	*	Managers, All Other Annual Openings = 98 Median Wage = \$89,470	*
*	*	*	Training and Development Specialists Annual Openings = 55 Median Wage = \$54,400	*
*	*	*	Human Resources Specialists Annual Openings = 55 Median Wage = \$53,570	*



Career Cluster : Architecture & Construction

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
Roustabouts, Oil and Gas Annual Openings = 92 Median Wage = \$36,150	Operating Engineers and Other Construction Equi... Annual Openings = 144 Median Wage = \$45,190	First-Line Supervisors of Construction Trades a... Annual Openings = 180 Median Wage = \$57,110	Construction Managers Annual Openings = 40 Median Wage = \$91,020	*
Derrick Operators, Oil and Gas Annual Openings = 51 Median Wage = \$44,590	Carpenters Annual Openings = 133 Median Wage = \$43,260	Electricians Annual Openings = 113 Median Wage = \$57,680	Civil Engineers Annual Openings = 29 Median Wage = \$89,960	*
Cement Masons and Concrete Finishers Annual Openings = 24 Median Wage = \$37,600	Service Unit Operators, Oil, Gas, and Mining Annual Openings = 96 Median Wage = \$56,600	Plumbers, Pipefitters, and Steamfitters Annual Openings = 88 Median Wage = \$43,260	Cost Estimators Annual Openings = 18 Median Wage = \$51,840	*
Septic Tank Servicers and Sewer Pipe Cleaners Annual Openings = 10 Median Wage = \$38,230	Highway Maintenance Workers Annual Openings = 53 Median Wage = \$35,730	First-Line Supervisors of Landscaping, Lawn Ser... Annual Openings = 48 Median Wage = \$48,910	Architectural and Civil Drafters Annual Openings = 13 Median Wage = \$45,100	*
Plasterers and Stucco Masons Annual Openings = 9 Median Wage = \$42,110	Painters, Construction and Maintenance Annual Openings = 41 Median Wage = \$38,260	Civil Engineering Technicians Annual Openings = 24 Median Wage = \$48,430	Architects, Except Landscape and Naval Annual Openings = 10 Median Wage = \$75,010	*

V. Research | Four Corners Economic Development- Focus Group Report Summaries

The following focus groups were held by the Four Corners Economic Development: Workforce Development Goal Team, led by Jose Villarreal, Jr. The primary goal for these focus groups was to obtain local industry qualitative workforce data to provide secondary and post-secondary curriculum alignment in preparing the next generation of workforce for college and career readiness. There were seven separate criteria collected in the focus group interviews, however, only four were needed for the purposes of this career pathways project: e.g., jobs in critical demand; essential skills, training and certifications required for high-demand occupations; gap in ongoing skills, training and certifications; and soft skills recommendations for next gen workforce.

Health Science Focus Group DATE: December 16, 2020	
Jobs in Critical Demand	
(PMS) Physicians	(Basin) Private Duty Care Workers
(PMS) Nurse Practitioners	(SJPMC) Registered Nurses (#1)
(PMS) Physicians Assistants	(SJPMC) Registered Respiratory Therapists
(PMS) Mental Health Therapists	(SJPMC) Certified Medical Assistants
(Basin) Social Workers	(SJPMC) Certified Nursing Assistants

Essential Skills, Training and Certifications required for high-demand occupations	
(SJRMC) BLS (Basic Life Support) Certification	(Basin) CAN Training, patient transfers, bathing and home safety Basin provides certifications in house
(SJRMC) ACLS (Advanced Cardiovascular Life Support)	(PMS) Mental Therapists require Master's Degree independently
SJRMC offers courses for education and recertification	(PMS) Providers, varies
(Basin) BLS	(PMS) Nurse Practitioners: Bachelor's Degree & Nurse Practitioner's License
(Basin) First Aid	(PMS) Physician Assistance Program is about 27 months post grad
(Basin) CPR	(PMS) Family Practice: Undergrad, Grad, Medical School, and 3-year residency
Providers for Certifications	
(SJRMC) San Juan College	(SJRMC) Pueblo Community College
Gap in ongoing skills, training and certifications	
(PMS) Front Desk Receptionist & Unlicensed Staff: Soft Skills	(SJRMC) Soft skills
(Basin) Soft skills	(SJRMC) Resume writing
(Basin) Life skills	(SJRMC) Phone and Voicemail skills
(Basin) Problem solving	(SJRMC) Interviewing skills
(Basin) Customer service	(SJRMC) Interpersonal skills
(Basin) Teamwork	(SJRMC) Professionalism
(Basin) Phone etiquette	(SJRMC) Grooming and appearance

Soft Skills recommendations for Next Gen Workforce	
(PMS) Time management	(SJRMC) Resume writing
(PMS) Grooming and appearance	(SJRMC) Email training
(PMS) Displaying respect	(SJRMC) Cover letter
(PMS) How to dress in a professional setting	(SJRMC) Reading, writing
(PMS) Resume writing	(SJRMC) Public speaking
(SJRMC) Microsoft Office	(Basin) Computer skills
(Basin) Email	(Basin) Resume writing

Construction & Engineering Focus Group	
DATE: January 27, 2021	
Jobs in Critical Demand	
(Geomat) Qualified Engineers	(XL) CAD position
(Geomat) Construction Materials	(Jaynes) Laborers and Carpenters

Technicians	
(XL) Equipment Operators (#1)	(Jaynes) Superintendent
(XL) Mid-level Craftsmen	(Jaynes) Mid-level Craftsmen
Essential Skills, Training and Certifications required for high-demand occupations	
(Geomat) Engineers: 4 Year Engineering Degree & 4 Year Internship	
(Geomat) Construction Materials Techs: Basic to high level Math Skills, Read Construction Drawings and Specifications, online (Specialized) Certifications	
(XL) Good Work Ethic, Math Skills, Input Skills for DFR	
(Jaynes) Superintendents: In House Safety Training: First Aid, CPR, OSHA 30	
(Jaynes) Craftsmen: Work Ethic, Etiquette, Teamwork, Interpersonal, Emotional Intelligence	
Gap in ongoing skills, training and certifications	
(Geomat) American Concrete Institution (ACI) Testing Certification	(Jaynes) Teamwork
(Geomat) NMDOT Certifications'	(Jaynes) Emotional Intelligence
(Geomat) Advanced Construction General Knowledge; e.g., reading blueprints, reading specifications	(Jaynes) People skills
(Geomat) Engineering real world experience	(Jaynes) Desire to learn
(Geomat) Drive and desire	(XL) Interpersonal effectiveness
(Jaynes) Work Ethic	(XL) (Engineers) ACI Flatwork Technician Certification
	(XL) Work ethic
Soft Skills recommendations for Next Gen Workforce	
(Geomat) Motivation to learn	(Jaynes) Interpersonal skills
(Geomat) Work ethic	(Jaynes) Teamwork
(XL) Hands-on problem solving	(Jaynes) Project based learning
(XL) Critical thinking	(Jaynes) Computer skills
(XL) Communication skills	(Jaynes) Recommends WBL Internships/Mentorships
(XL) Work ethic	

Manufacturing Focus Group	
DATE: March 3, 2021	
Jobs in Critical Demand	
(PESCO) Welder	(Clay-Groomer) Machinist
(Sulzer) Machinist	(Clay-Groomer) Welder
(Sulzer) Welder	(Jack's) Welder
Essential Skills, Training and Certifications required for high-demand occupations	

(Sulzer) ISO Certification	(PESCO) Quality (9001)
(Sulzer) Health and Safety Training (45001)	(PESCO) ISO Certification (9000)
(Sulzer) Environmental (14001)	(Clay-Groomer) ISO Certification
(Sulzer) Quality (9001)	(Jack's) ISO Certification
Gap in ongoing skills, training and certifications	
(PESCO) Management and Leadership skills	(Jack's) Work ethic
(PESCO) Process & Project Management	(Jack's) Problem Solving
(PESCO) Computer skills	(Jack's) Critical thinking
(PESCO) Process Management	(Jack's) Trouble shooting
(PESCO) Initiative, self-starter	(Jack's) Electrical repair
(PESCO) Software skills	(PANEL) Computer Automated Design (CAD)
(Jack's) Reading and Comprehension	(Clay-Groomer) Work ethic
(Jack's) Basic Math skills	(Sulzer) Desire and drive
Soft Skills recommendations for Next Gen Workforce	
(PESCO) Work-Based Learning Internships/Mentorships	(Sulzer) Exposure to industry
(PESCO) Vocational Training	(Jack's) Time Management
(PESCO) Career Pathway programs	(Clay-Groomer) Exposed to industry

Film Focus Group	
DATE: April 1, 2021	
Jobs in Critical Demand	
(NM Film) Production Accounting Personnel	(NM Film Liaison) Location Scout
(NM Film) Costuming Department	(SJC Digital) Construction
(NM Film) Construction	(SJC Digital) Graphic Design
(NM Film) Hair and makeup	(SJC Digital) Electrician
(NM Film) Electrician	(SJC Digital) Welder
(NM Film) Welder	(SJC Digital) CDL Transportation
(NM Film) Plastic Artist	(SJC Digital) Accounting
(NM Film) Production Assistant (#1)	(SJC Digital) DIT Video Assistant
Essential Skills, Training and Certifications required for high-demand occupations	
(NM Film) Set etiquette	(NM Film) Transferable skills
(NM Film) Highly responsive	(NM Film) Bookkeeping
(NM Film) Pride in work	(NM Film Liaison) Work ethic
(NM Film) Positive Attitude	(SJC Digital) CDL
(NM Film) Work ethic	(Film 4C) Hands on learning
Gap in ongoing skills, training and certifications	
(NM Film) Workforce pipeline	(SJC Film) Set etiquette
(NM Film) Film production experience	(SJC Film) Lack of system in education

(NM Film) Lack of awareness in education	(NM Film Liaison) Local onboarding system
Soft Skills recommendations for Next Gen Workforce	
(NM Film) Respect	(NM Film) Communication skills
(NM Film) Networking	(NM Film) Creative thinking
(NM Film) Work ethic	(NM Film) Interpersonal effectiveness
(NM Film) Positive attitude	(NM Film) Relationship building

VI. Research | New Mexico Public Education Department: College and Career Readiness Bureau- Region A Consortium Results (NOTES) from January 2020:

Target Industries for Investment:

- Healthcare
- Intelligent Manufacturing
- Information Technology, including:
 - Artificial Intelligence
 - Big data/data analytics

Across all program, weave in Entrepreneurship preparation to support the maximum opportunity for CTE graduates

Top Programs of Study to Pursue Include:

- Health Science (16 votes)
- Manufacturing (16 votes)
- Information Technology (15 votes)
- Transportation and Logistics (8 votes)

Characteristics of the Workforce Talent of Region A:

- Proactive
- Well-Qualified, Skilled
- Initiators
- Ethical
- Resilient
- Versatile
- “Unicorn” able to have a broad body of knowledge across multiple areas of experience
- Experienced
- Credentials (diplomas, degrees, certificates)
- Motivated
- Passion
- Culture
- Adaptable (ability to learn)/Coachable/Trainable
- Diverse
- Prepared

Characteristics of our CTE program to build the talent we need:

- Promotes a regional identity for our talent

- Leverages the collective educational assets of the region (colleges and schools) to generate deep pools of talent
- Be able to recruit the diverse members of the region
- Generates talent with both hard and “soft” skills/employability skills
- Relevant, aligned, and responsive to the business and industry needs of the region
- Provide work-based learning opportunities, like apprenticeships
- Provides the wrap-around supports needed for students to be successful
- Other characteristics of the talent our CTE programs will create include:
 - “Employability skills”
 - Disciplined
 - Business Etiquette
 - Innovators

VII. Analysis/Proposal | Industry Focus Group Interview Summary Data | Student Career Interest Survey Data | CTE - LMI Data | CCRB Consortium (Notes) Data

Based on industry focus group interview data; student career interest survey data; Pathways 2 Careers (P2C) Career Cluster LMI data; and CCRB consortium data; the following outline are the analysis & proposal recommendations for Bloomfield Schools Career and Technical Education (CTE) Career Pathways.

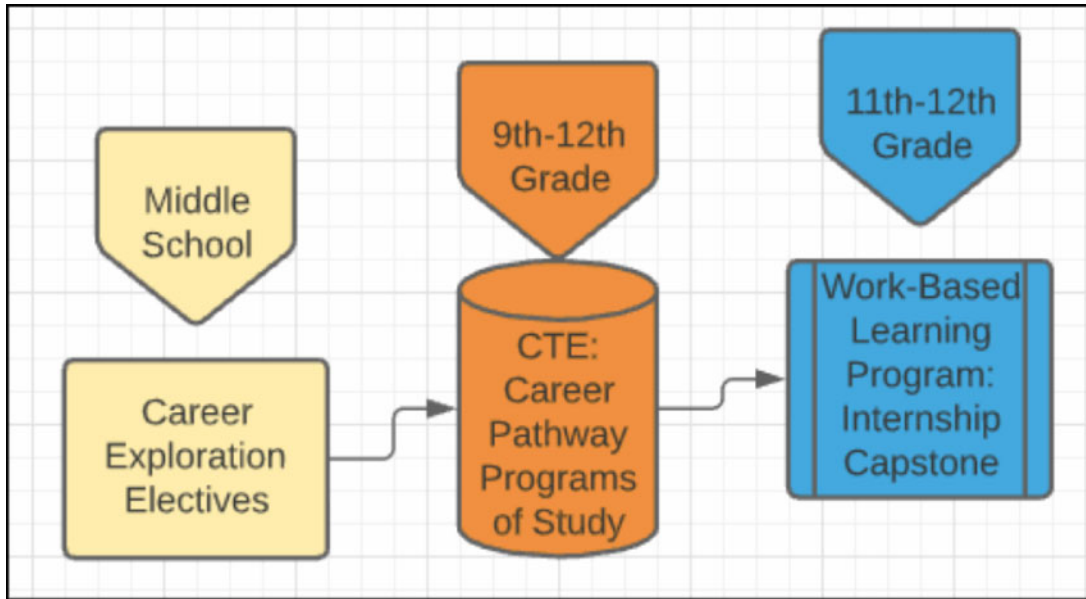
Industry Focus Group Summary | CTE- LMI Data Analysis:

Jobs in Critical Demand: Health Science, Construction & Engineering, Manufacturing, Film, and IT & Cyber Security	
Health Science: Registered Nurse	Manufacturing: Welder
Health Science: Medical Assistant	Manufacturing: Machinist
Construction: Mid-level Craftsmen	Film: Production Assistant
Construction: Equipment Operator	Film: Construction
Engineering: Qualified Engineer	IT & Cyber Security: Software Developer
Engineering: Construction Materials Technician	IT & Cyber Security: Network Systems Administrator

Industry Focus Group Summary Analysis:

Ongoing Skills & Next Generation Skills Gap	
Work Ethic	Problem Solving
Teamwork – Interpersonal Effectiveness	Time Management
Communication	Professionalism
Respect	Positive Attitude

CTE Career Pathways Proposal: Sequence



The above diagram is a visual of a college and career readiness sequence, beginning with career exploration elective courses as early as 6th grade, sequencing to CTE Career Pathway Programs, and ending with a [capstone] Work-Based Learning internship for a hands-on experience in the real world of work.

CTE Career Pathways Proposal: Sequence Defined

Bloomfield Schools – CTE Career Pathway Programs of Study: Recommendations

Bloomfield Schools (6th-8th): Middle School Career Exploration Elective(s)

Recommendation 1:

Mesa Alta Junior High School – Career Exploration: Expansion

- Financial Literacy and Consumer Behavior (6th grade)
- Fundamentals of Employability Skills (7th grade)
- Career Exploration (8th grade)

Bloomfield Schools (9th-12th): CTE Career Pathway Programs of Study

Recommendation 2:

Bloomfield High School – CTE Career Pathways: Enrichment

CTE Pathway	9 th	10 th	11 th	12 th
Digital Media Arts (18.7% - #1 Student Rank)	Studio Art (Visual Arts)	3D Animation	Dual Credit SJC – Film & Digital Media Arts	Capstone: WBL Internship
Construction & Architecture	Intro to Carpentry	Advanced Carpentry	Mechanical & Technical	Capstone: WBL

(7.6% - #5 Student Rank)			Drafting	Internship
Business (7.8% - #4 Student Rank)	Intro to Business	Entrepreneurship	Principles of Marketing	Capstone: WBL Internship

Recommendation 3:

Bloomfield High School – CTE Career Pathways: Expansion

CTE Pathway	9 th	10 th	11 th	12 th
Health Science (17.8% - #2 Student Rank)	Health Occupations I	Health Occupations II	Anatomy & Physiology/Dual Credit SJC	Capstone: WBL Internship

REC #1 – Work-Based Learning Program Capstone: Expansion

The Work-Based Learning (WBL) internship capstone is the primary bridge between education to workforce. There is national evidence that school districts who've developed and implemented an employer driven WBL Program as the capstone for junior or senior CTE pathway students- generate a robust workforce pipeline, in addition to an average of “8% increase in graduation rates” (CTE Data Story, U.S. Department of Education).

The employer driven Work-Based Learning Model is designed with the aforementioned sequence, 6th-8th grade career exploration – 9th-11th grade CTE career program of study courses – 11th-12th grade WBL internship.

WBL Internship Semester Process Outline:

Pre-Internship

1. WBL Application
2. Counselors Screen Applicants
3. Students Register for Internship Course
4. 2-Week Employability Skills Bootcamp
5. Mock Interview Day
6. Employer Interview Day
7. Internship Placements

During Internship

8. Weekly Employability Skills Survey (Mentor Feedback)
9. Weekly Employability Skills Reflections (Student Interns)
10. Bi-Weekly Employer Validated Timesheets

Post Internship

11. Student Intern Final Project (Panel Interview)
12. Intern, Mentor, Parent/Guardian WBL Formal Banquet

VIII. Implementation Timeline | Bloomfield Schools- CTE Career Pathways/WBL Program

The following timeline is initiated once the necessary policy, procedural, and organizational structures has been accomplished to support these pathways.

Start-up Planning Timeline for Career Pathway Program	
Recruit CTE Career Pathways Instructors Identify current school district instructors with an internal investigation of qualified candidates. Conduct recruitment efforts if needed.	Months 1-3
Form a Career Pathway Program Advisory Committee Identify school, employer, higher education, and parent representatives; establish a schedule of meetings and define members' roles and responsibilities; form task forces, e.g., expanding partners, technical curriculum, facilities, equipment.	Months 3-5
Identify/Prepare Program of Study Instructional Team Select a Lead Teacher; other teachers (career and academic), school and district administrators, and a counselor; provide professional development.	Months 3-5
Clarify Roles and Responsibilities for Design Phase Ask the Career Pathway Program Advisory Committee to plan and coordinate employer and community engagement; advise the Pathway Program Instructional Team to design curriculum, assure secondary-postsecondary-employer alignment, create an internal process for planning and student support, and develop roles for employer and community engagement.	Months 3-8
Develop Curriculum Have the teachers lead, draw on employers for technical input, examine related state standards, conduct Internet searches, visit other schools with Pathway Programs, and develop integrated curriculum ideas; design program scope for three levels of high school and additional postsecondary levels leading to relevant certifications and degrees. Integrate employability (soft) skills curriculum into each pathway.	Months 5-8
CTE Career Pathway Instructor Professional Development Investigate and initiate career pathway instructor professional development. Communicate and collaborate with other local school district career pathway teachers and best practices.	Months 5-12 (Ongoing)
Coordinate the Career Pathway Program within the High School and College Inform the entire school staff, orient counselors, arrange cohort scheduling, schedule Pathway Program classes, and coordinate with employer leaders; integrate information into relevant career development or freshman	Months 6-9

seminar classes. Also reach out to San Juan College early in the process.	
Recruit and Select Students Create basic Pathway Program information to share with students and counselors; distribute information to all freshmen, accept and screen applications, hold interviews and parent meetings, identify and schedule students, and plan summer activity.	Months 6-9
Prepare Motivational Activities Identify activities that will make the Pathway Program appealing, including what types of student monitoring and rewards will be used.	Months 9-12
Welcome First Cohort of Students	Month 12
Plan Work-Based Learning Program Ask the Pathway Program Advisory Committee and REC-1 Executive Director to select/hire REC-1 WBL Coordinator; provide Work-Based Learning vision to new hire; establish goals and timeline for WBL Program research and development; designate program to start next school year.	Months 12-16

IX. Cost Analysis | Bloomfield Schools- CTE Career Pathways/WBL Program

The cost analysis planning is a combination of current Bloomfield Schools CTE staff (stipends, PD), new FTE CTE staff, new Work-Based Learning Coordinator (REC-1), Professional Development (PD), and Materials and Equipment for the funding duration of 3 fiscal years.

CTE Staff Stipend/Salary	-
Current CTE Staff:	\$15,000/annual stipend x 3 = \$45,000/yr.
New FTE CTE Staff (Health Science; Salary+Benefits)	\$72,000/yr.
WBL Coordinator (Salary+Benefits):	\$90,000/yr.
Next Gen Skills/CTE – Instructor PD	-
Initial Yr. 1 (includes: food, travel):	\$50,000
Ongoing Yrs. 2-3:	\$30,000
Instructional Resources	-
Materials Yr. 1:	\$35,000
Equipment Yr. 1:	\$75,000
Additional Materials & Equipment Yrs. 2-3:	\$25,000

X. Conclusion

In summary, the research performed in collecting local, regional and national school district and workforce development data confirms the need to expand the current Bloomfield School District Career and Technical Education (CTE) Career Pathways

structure. “Beefing up” the current CTE course sequence is the initial phase that can occur with the most optimal, cost-effective outcome with the pathways that are currently in place at Bloomfield Schools; utilizing and training current middle school and high school FTE CTE staff.

Expansion is recommended as a secondary phase that runs parallel with the initial phase, proposing a new Health Science career pathway with a recommendation of a new FTE CTE Health Science instructor. In addition, recruiting a REC-1 Work-Based Learning Coordinator in order to finalize the Bloomfield School District CTE Career Pathway sequence; capping the sequence with internships and/or apprenticeships with local high-value business partners. Once the necessary policy, procedural, and organizational structures have been approved for the recommended Career Pathways at Bloomfield School District; the phases have the most realistic success with a 3-year development and implementation plan, e.g., XIII Implementation Timeline and IX Cost Analysis.

XI. Sources Cited

- NS4ed. Pathway2Careers, 2021. <https://www.careerpathways-nm.com/>
- The Power and Promise of Pathways. Meeder, Hans. How to Prepare All American Students for Career and Life Successes, 2016.
- Four Corners Economic Development. Workforce Development Goal Team, Jose Villarreal, Jr., Lead. 2021.
- New Mexico Public Education Department. College and Career Readiness Bureau. Region A Consortium, January 2020.
<https://webnew.ped.state.nm.us/bureaus/college-career-readiness/career-technical-education/>
- U.S Department of Education. CTE Data Story, September 2019.
<https://www2.ed.gov/datastory/cte/index.html>