

Montana's Future at Work CTE Summit 2023



Welcome!

Day 1 Agenda

- 9:00 Welcome and Introductions
 - Regent Todd Buchanan
 - Provost Sep Eskandari MSU-Billings
 - Speed Dating
- 9:45 Commissioner Sarah Swanson DLI
- 10:00 Break
- 10:15 State of the State – Dual Enrollment and CTE
- 11:00 Women in Welding/Firefighting
- 12:00 Lunch
- 12:45 Student Panel
- 1:30 Executive Director Mike Halligan
- 2:00 Break
- 2:15 Montana Future at Work Awardee Presentations
- 3:00 Education Design Labs
- 4:00 Tour Red Lodge CTE
- 5:00 Reception at the Pollard



Regent Todd Buchanan



Provost Sep Eskandari



Speed Dating

- 1) Name and what you are most excited about for the Summit
- 2) What is your role? How do you engage to help address Montana's workforce needs?

Commissioner Sarah Swanson



Montana Department of
LABOR & INDUSTRY

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Montana's Future at Work Summit: State of the State

Office of the Commissioner of Higher Education

Chase Stahl, Data Specialist

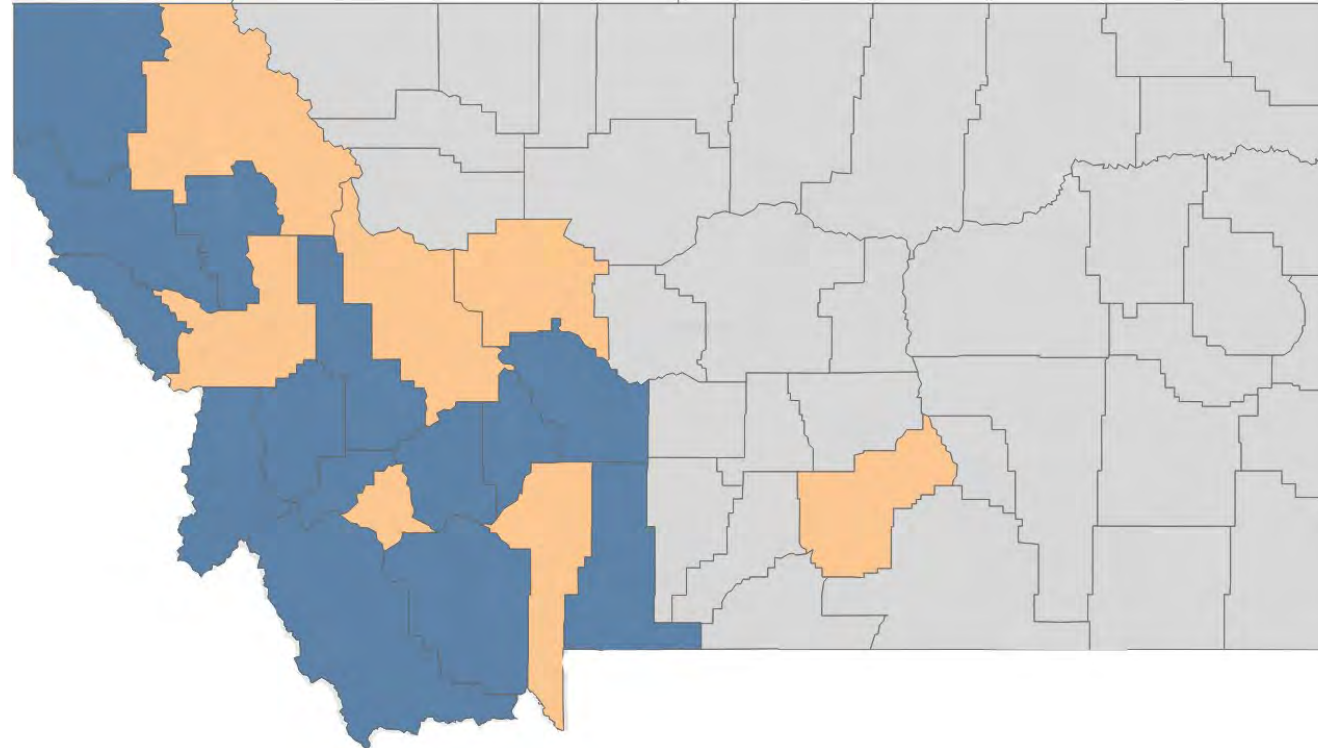
Overview

- **Dual Enrollment snapshot (MUS)**
 - CTE Dual Enrollment
- **Postsecondary Perkins V & CTE Enrollment (MUS + TCU)**
 - Special Populations
 - Career Cluster
 - Credentials
- **Comparative Analysis by Career Cluster**



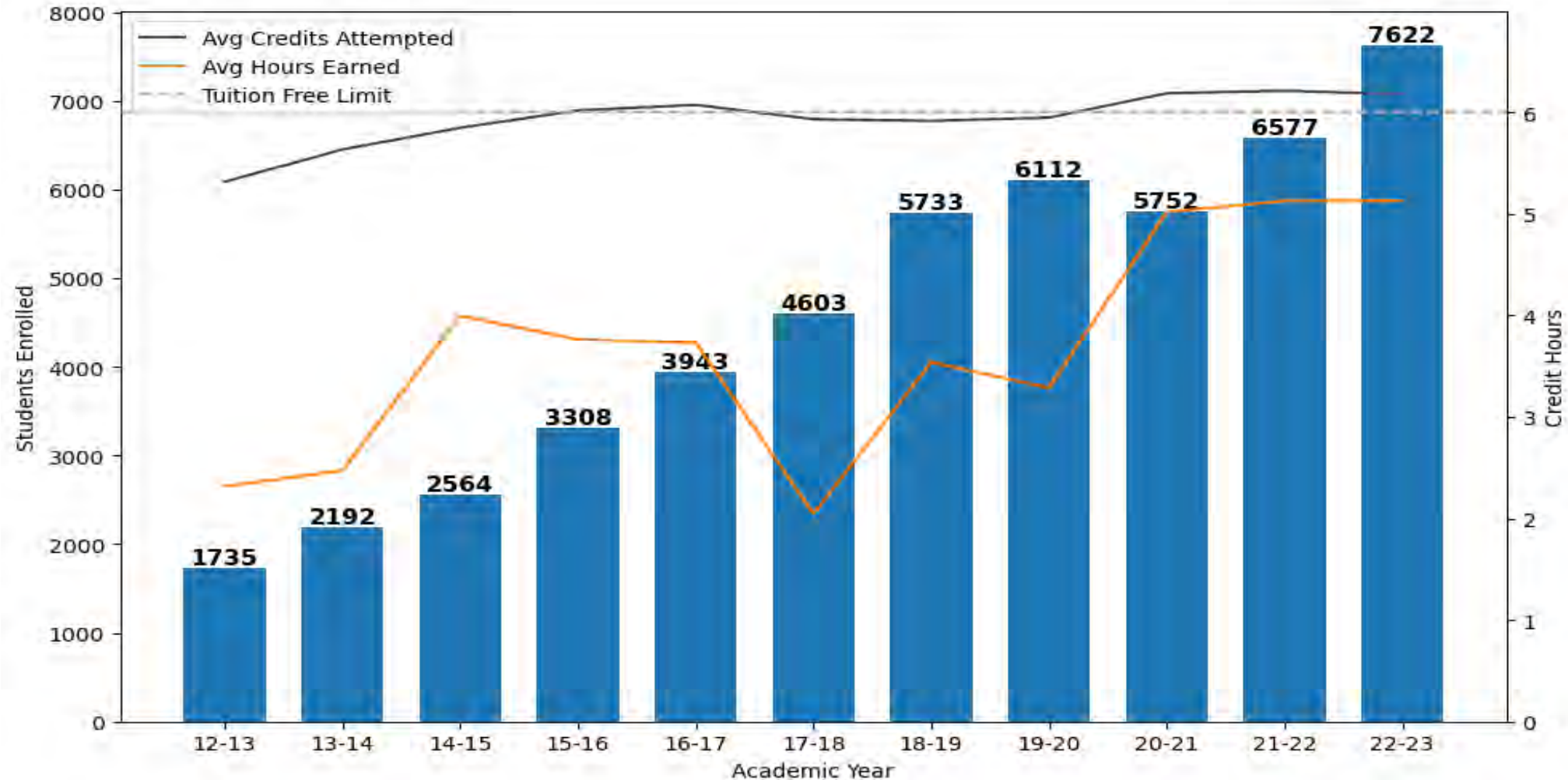
Dual Enrollment Participation by Region

Participation rates = total public dual enrollment students / total public high school junior and seniors



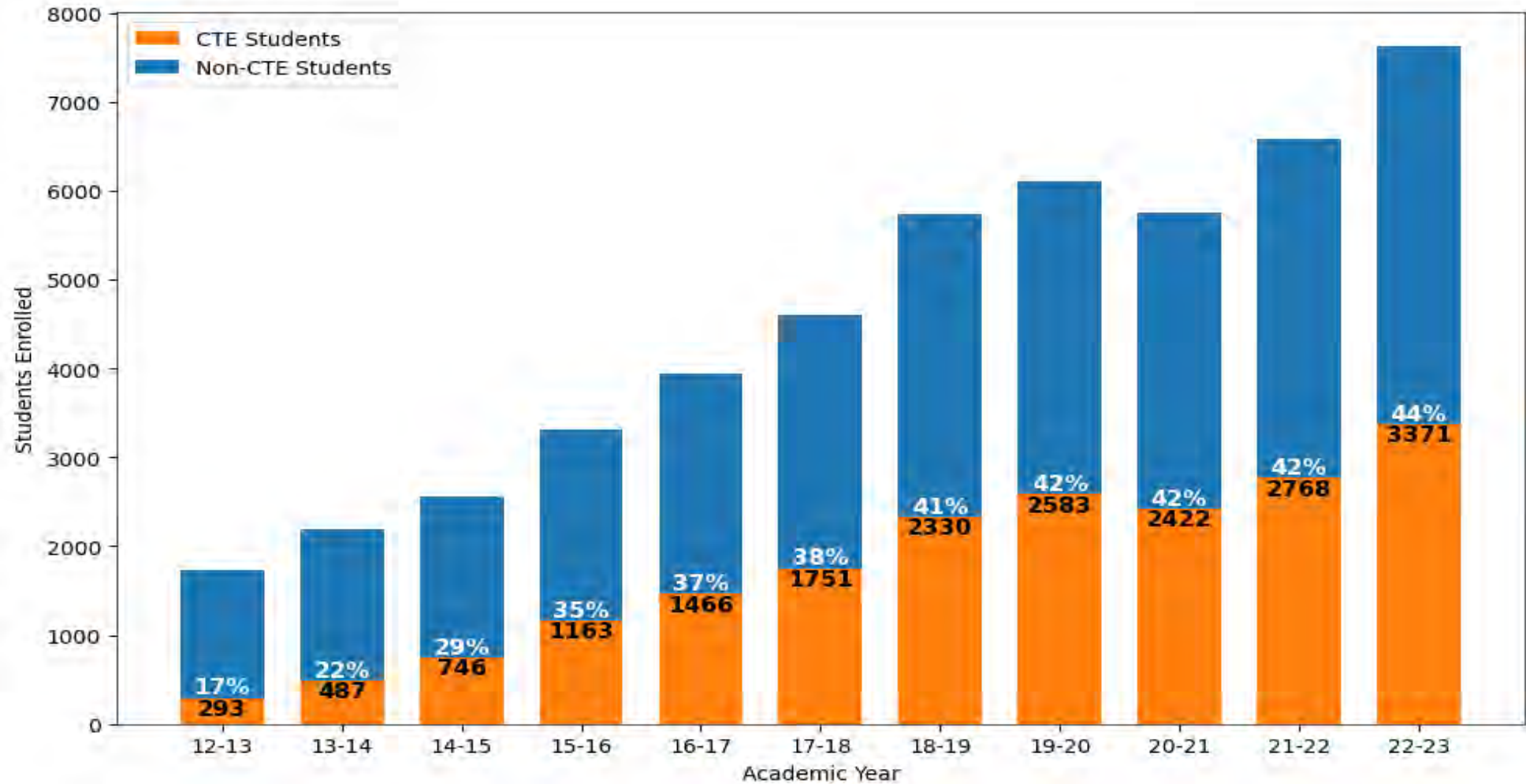
Color	Region	Participation Rates	% of DE Students Taking CTE Courses
Orange	Urban	31.1%	43.3%
Dark Blue	Mountains	35.6%	39.2%
Light Gray	Prairie	33.1%	47.6%

Dual Enrollment Count by Year



16.4% average enrollment growth per year
15.9% enrollment increase from 2021-22

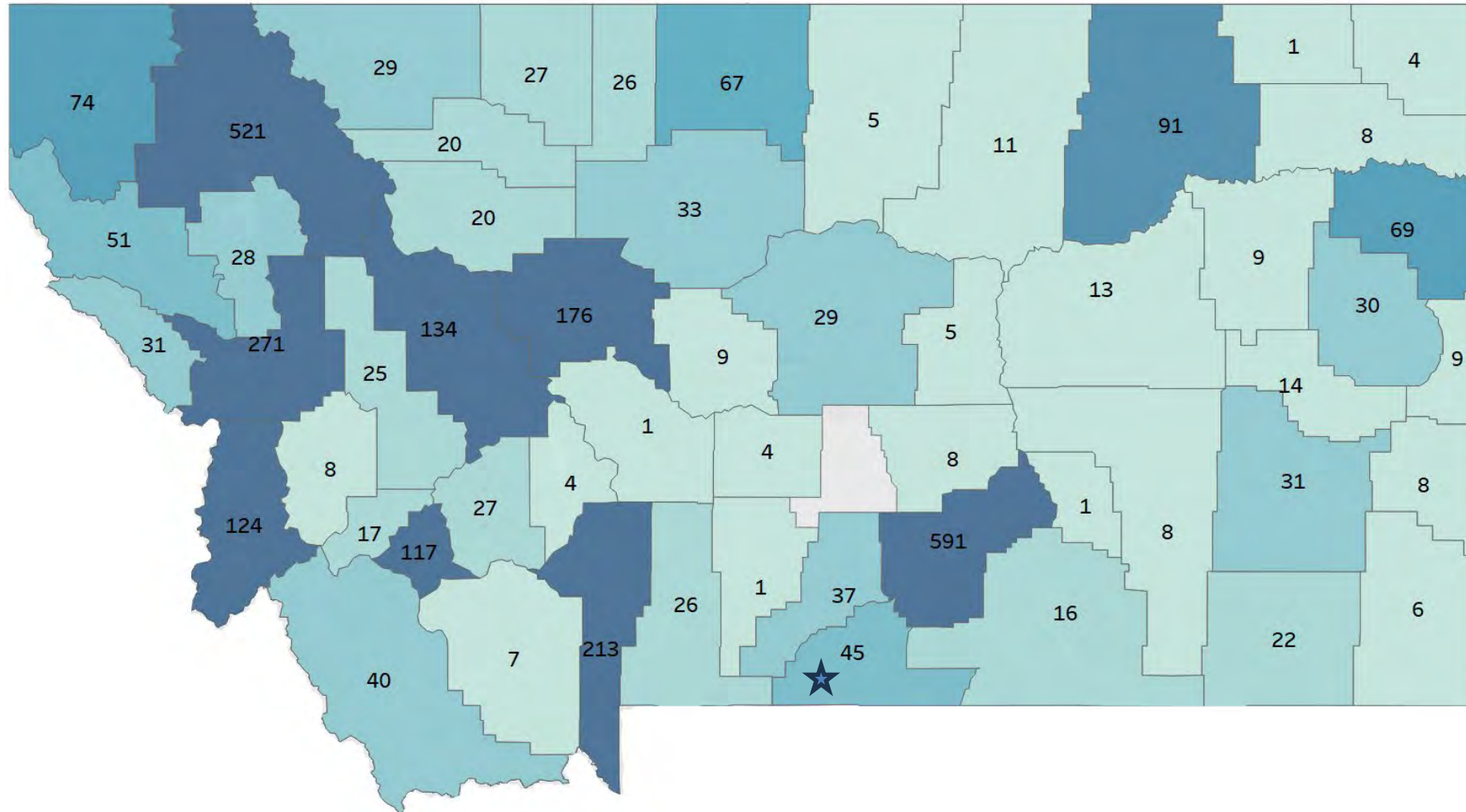
Dual Enrollment CTE Count by Year



15.5% average CTE enrollment growth per year since 2016-17
21.8% CTE enrollment increase from 2021-22

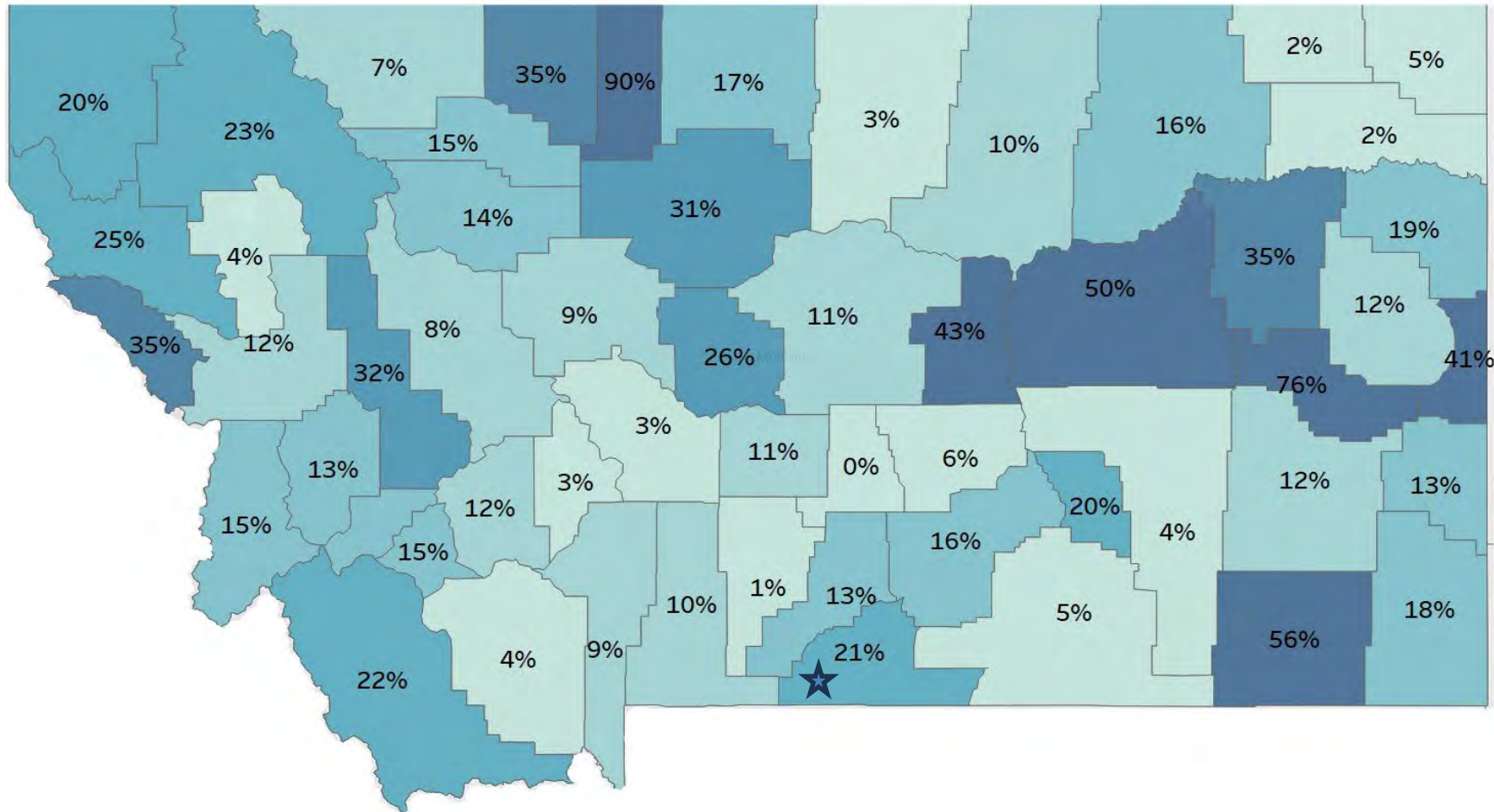
Dual Enrollment CTE Count by County

Number displayed = total CTE dual enrollment students



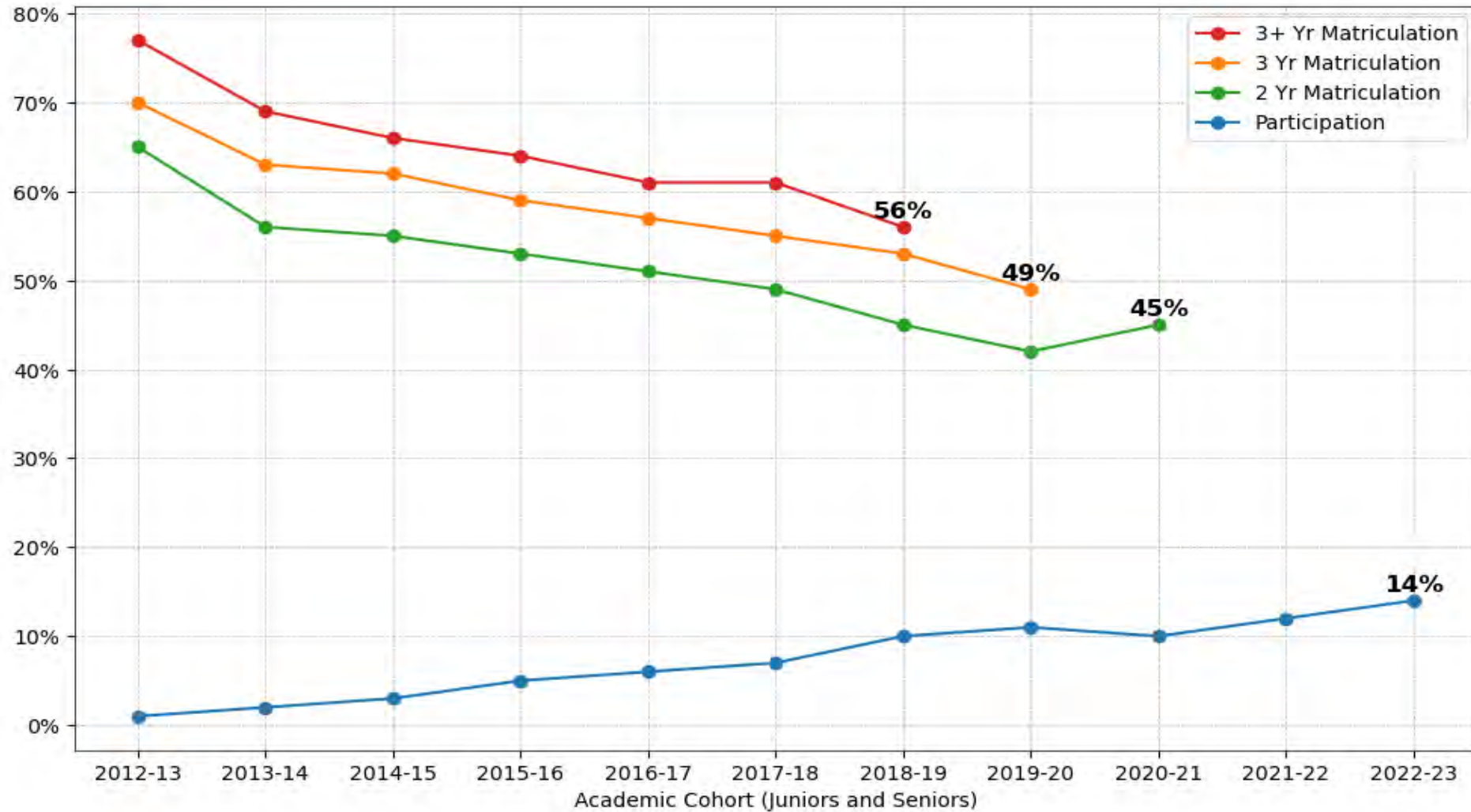
DE CTE Participation Rate by County

Participation rate = total public CTE dual enrollment students / total public high school juniors and seniors



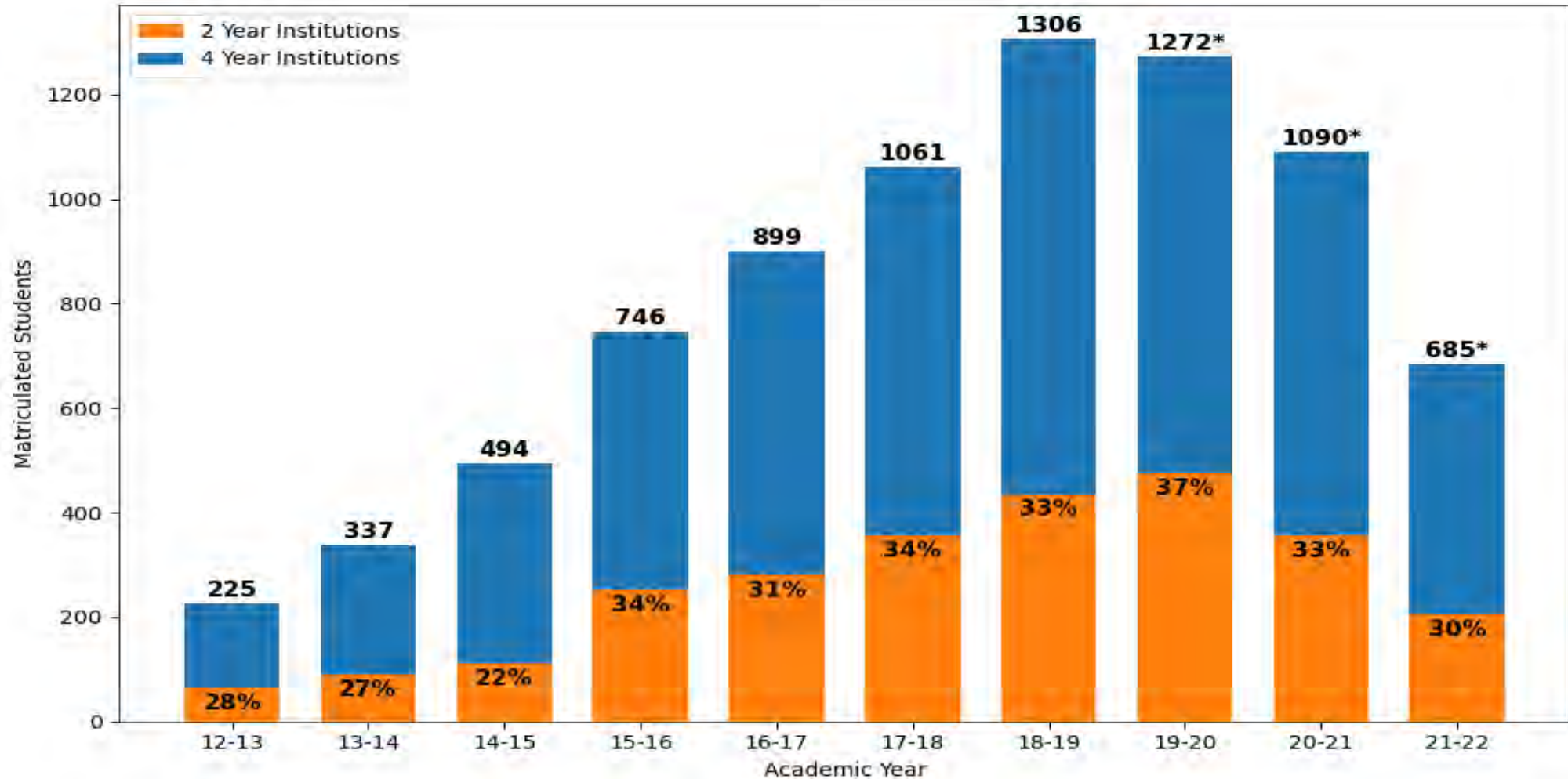
14% of MT public high school junior and seniors participated in CTE courses 2022-23

CTE DE Participation & Matriculation Rates



86% of matriculated CTE DE students enrolled within 2 years

CTE Dual Enrollment Students in the MUS by Year

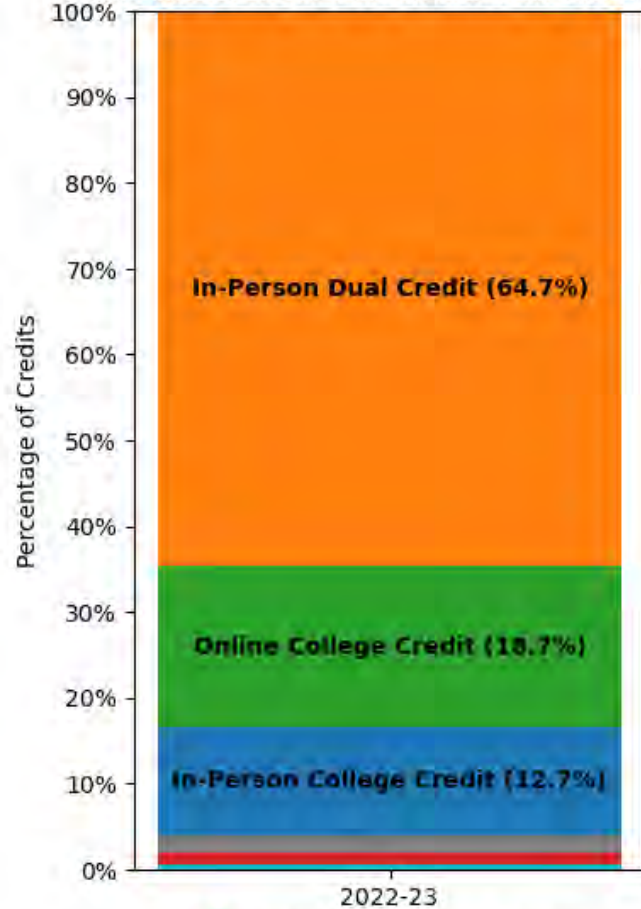


34.8% matriculation growth per year from 2012-13 to 2018-19

*** asterisk indicates expected increase**

DE CTE Subjects and Coursework

Distribution of CTE Credits in 2022-23



- Other Dual Credit (0.6%)
- Online Dual Credit (1.4%)
- Other College Credit (2.0%)

Top 5 CTE Subjects

Welding

Communications

Computer Applications

Allied Health: Medical Support

Computer Science

Top 5 CTE Courses

Intro to Public Speaking

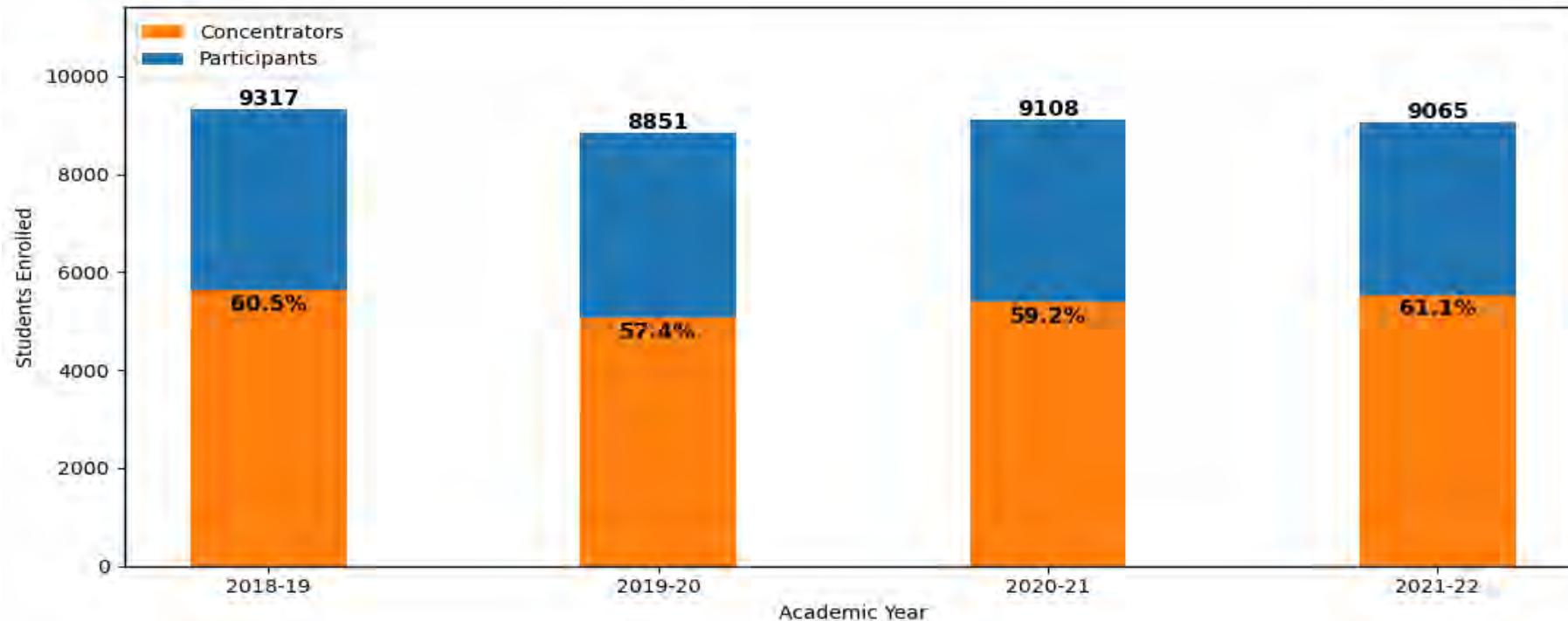
Welding Theory I Practical

Medical Terminology

Introduction to Business

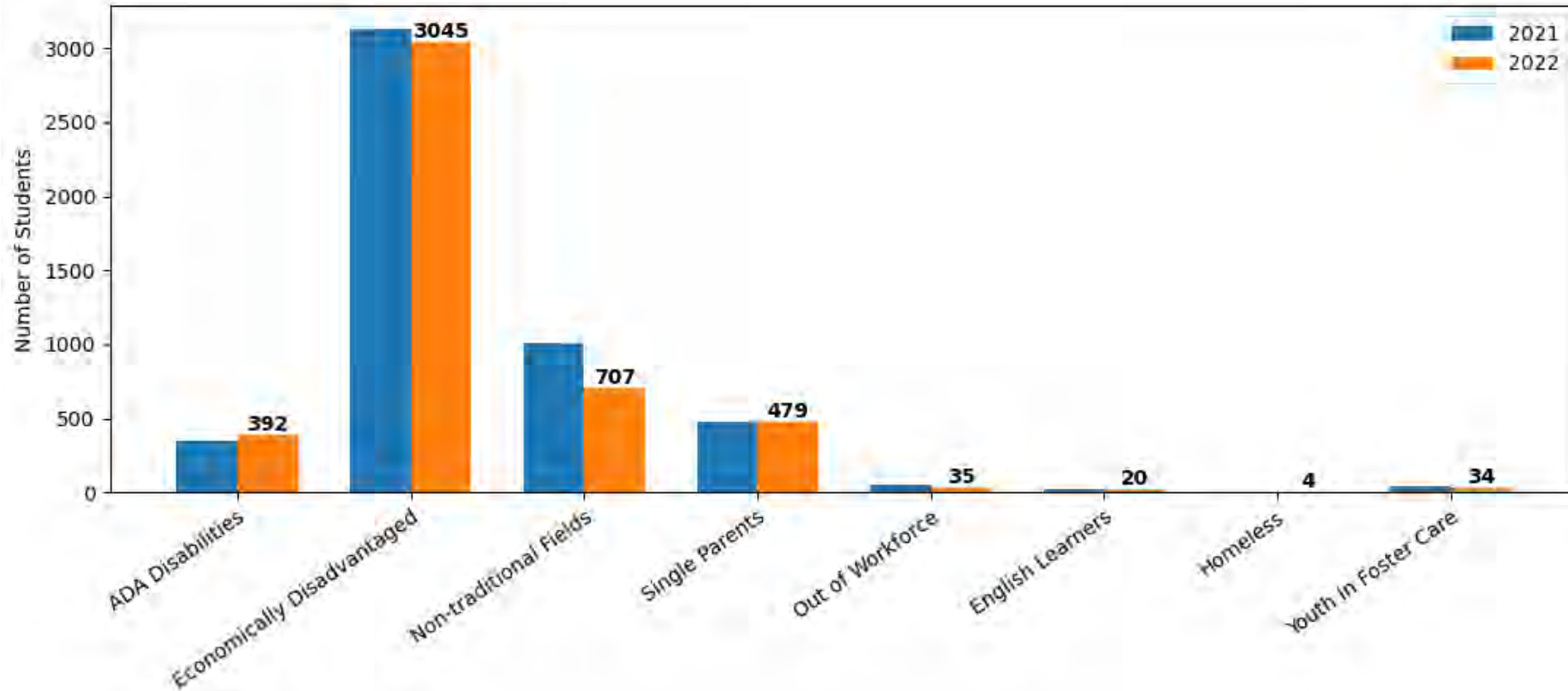
Welding Qualification Test Prep

Perkins V and CTE Enrollment



- Perkins Participant- any student that has completed at least one credit in any CTE program area
- Perkins CTE Concentrator- any CTE student who has earned at least 12 credits within a CTE program of study, or completed such a program if it encompasses fewer than 12 credits
- Career Cluster- a broad grouping of occupations and industries based on commonalties (NCES)
- Perkins V Special Populations- 8 reported demographic groups of CTE students

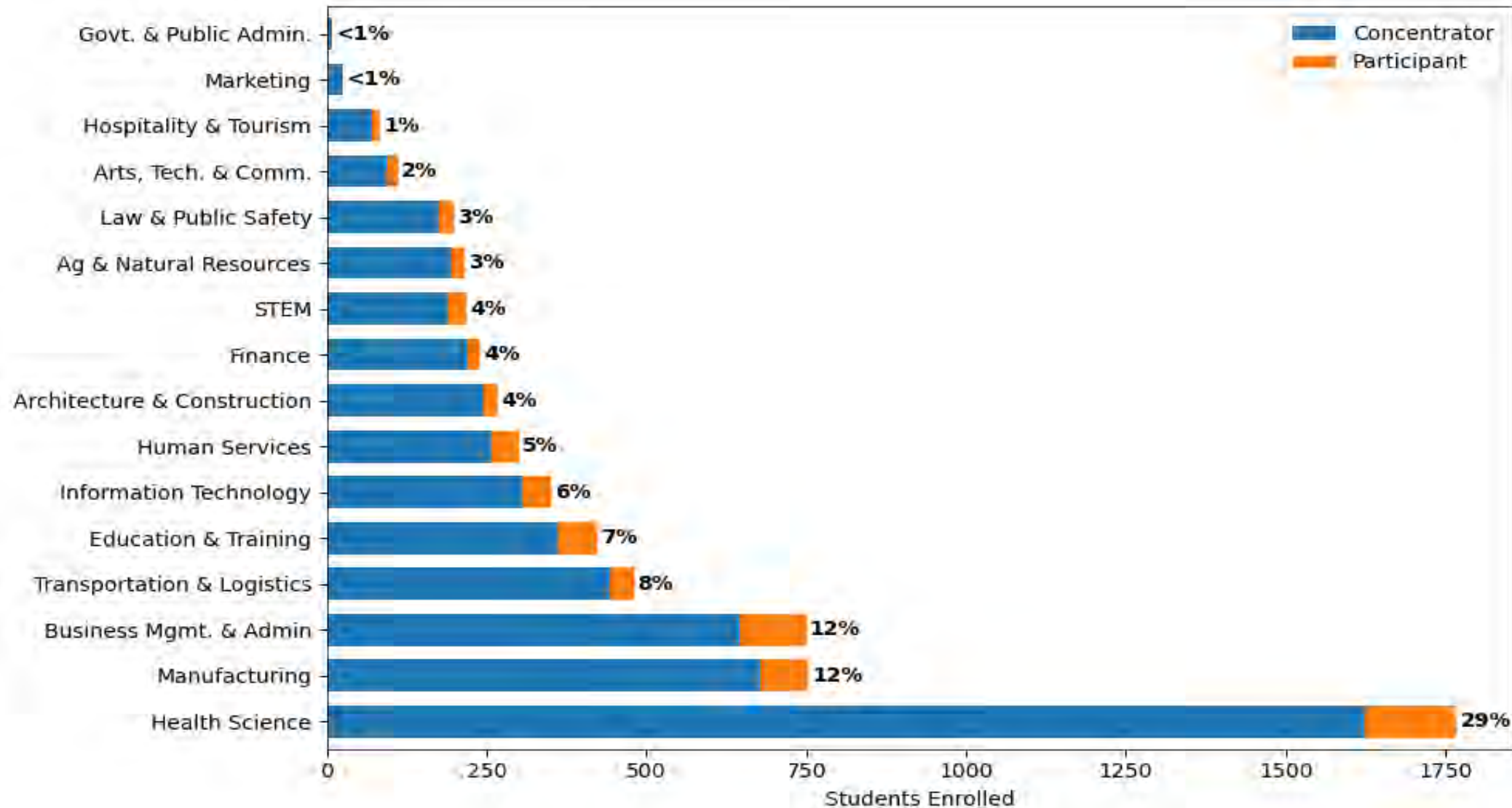
Perkins V Special Populations in MT



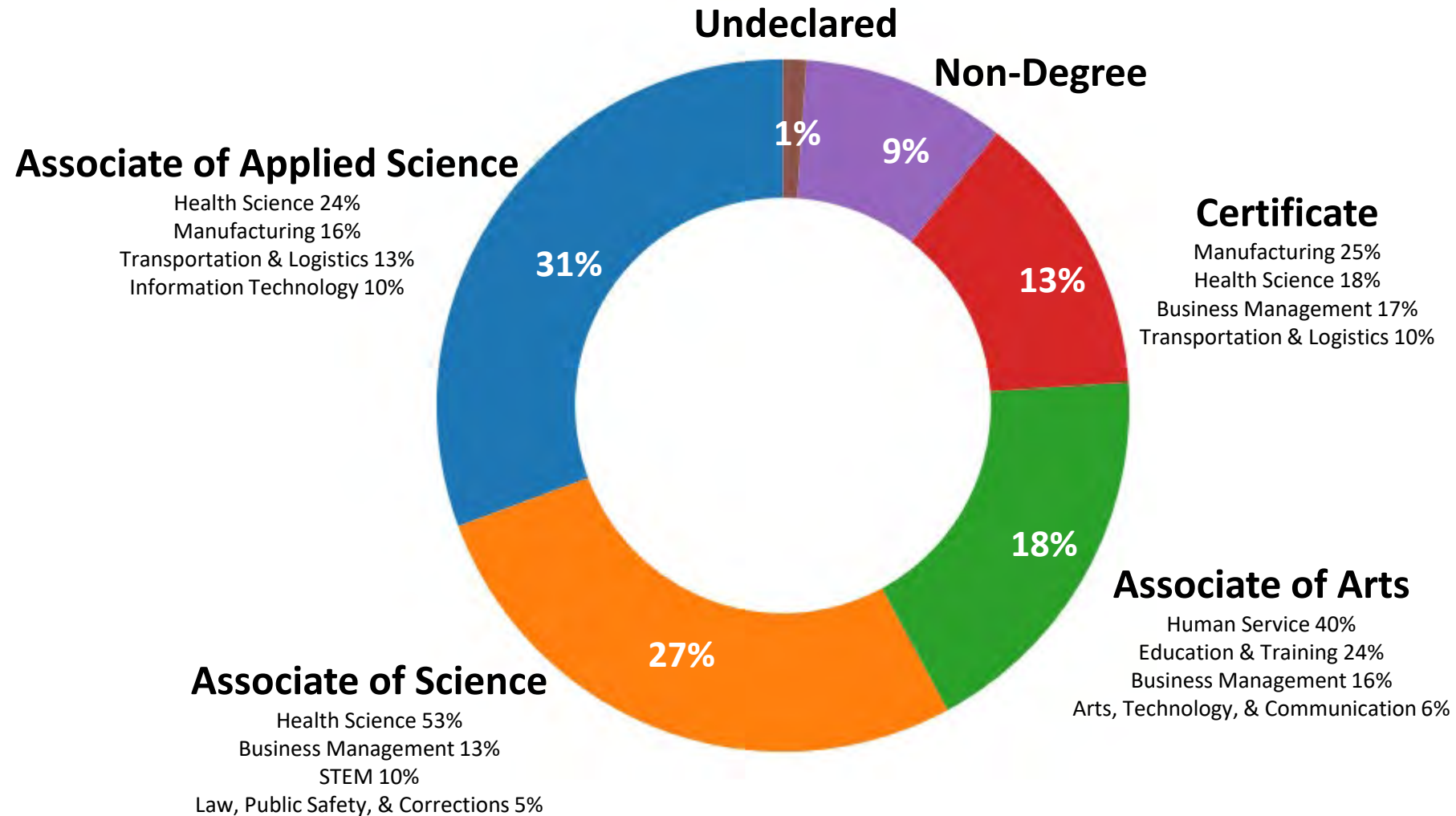
One of the main purposes of the Perkins V legislation is to develop more fully the academic knowledge and technical employability skills by increasing employment opportunities for populations who are chronically underemployed, including special populations.

Economically disadvantaged students represent 34% of all CTE students

CTE Career Cluster Distribution



CTE Students by Credential & Career Cluster



Comparative Analysis by Cluster

Career Clusters	% DE CTE Credits	CTE Students	Projected Job Growth from 2022-2024	2024 Total Job Openings
Health Science	17%	29%	3%	11,800
Manufacturing	24%	12%	1.9%	4,800
Business Management	15%	12%	1.4%	23,400
Transportation & Logistics	<1%	8%	2.5%	12,000
Education & Training	11%	7%	0.8%	5,300
Information Technology	11%	6%	2.7%	1,700
Human Services	<1%	5%	2.4%	2,300
Architecture & Construction	5%	4%	4.5%	9,400
Finance	1%	4%	3.1%	5,900
STEM	<1%	4%	3.9%	1,800
Ag & Natural Resources	<1%	3%	3.6%	4,100
Arts, Tech & Comm.	15%	2%	2.5%	2,500

Key Takeaways

- **16% dual enrollment and CTE DE growth rate per year – record enrollment**
- **65% of all CTE DE courses are taken as dual credit and in-person at the high school**
- **Consistent Perkins CTE enrollment at roughly 9,100 students the past 4 years**
- **The economically disadvantaged special population represents 1/3 of Perkins CTE students**
- **53% of Perkins CTE students enroll in manufacturing, business management and health science career clusters**
- **58% of Perkins CTE students enroll in Associate of Applied Science or Associate of Science programs**
- **56% of CTE DE students matriculate into the MUS**

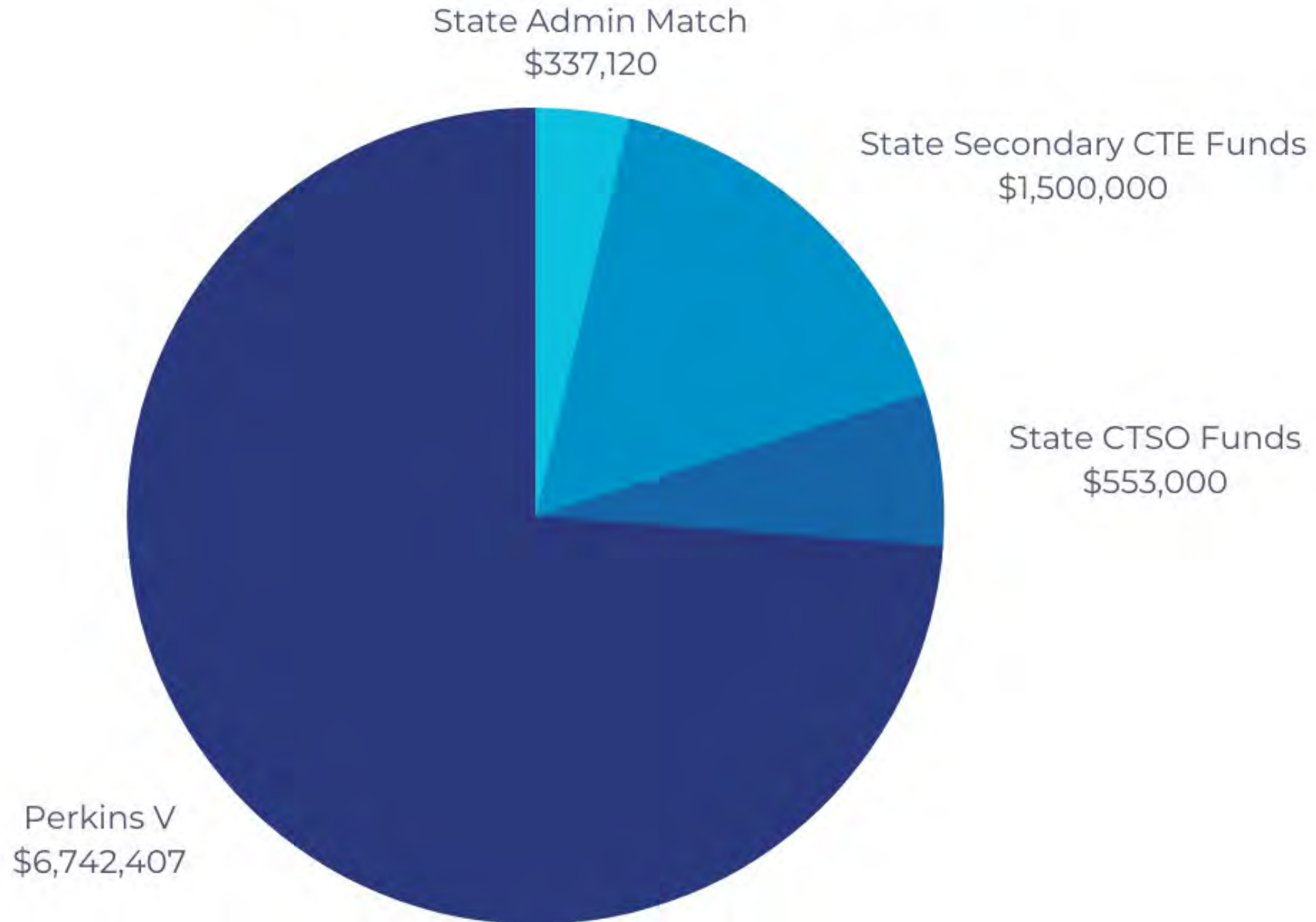
Perkins State Plan Renewal

Jacque Treaster

Director of Dual Enrollment and Career & Technical Education



CTE Funding in Montana



2024 Perkins V State Plan



- Statewide vision for CTE and the Workforce Development System in Montana
- Alignment between secondary → postsecondary → workforce
- Statewide strategies to support the recruitment and preparation of CTE instructors, including professional development
- Strategies and activities to support work-based learning
- Review and revise data performance indicators

Timeline



- September/October 2023 – Perkins Stakeholder Survey
- October 2023 – Data Review for State Determined Levels of Performance
- November 2023 – First Perkins State Plan Committee Meeting & Board of Regents Update
- December 2023 – Governor’s Office Consultation
- January 2024 – State Agency Leadership Consultation
- February 2024 – Public Hearings
- March 2024 – 60-Day Public Comment & Board of Regents Approval of State Plan
- May 10, 2024 – Submission of State Plan

Required Stakeholder Consultation



- Community College and Postsecondary CTE Leadership
- Tribal College Leadership
- Adult CTE Providers
- Secondary and Postsecondary CTE Teachers/Faculty
- Representatives of the State workforce development board
- Parents, students, interested community organizations
- Members and representatives of Special Populations
- Representatives of Business and Industry, which include industry and sector partnerships and representatives of labor organizations
- State Coordinator for Homeless Children and Youth
- Representatives of Indian Tribes and Tribal Organizations
- Individuals with disabilities

Contact for More Information



Jacque Treaster

jtreaster@montana.edu

(406) 449-9135

WOMEN IN AUTOMOTIVE

KAT PFAU

&

KAILI PAYNE

Creative Brainstorming

- Non-traditional Occupations Grant Opportunity
- How do we get women interested in non-traditional fields?
- Automotive-focused



Building the Environment

- A safe environment for women
- Taught by women
- Women can ask questions
- Explore a traditionally male-dominated field
- A learning opportunity



The Class

- Lecture
 - Types of fluid
 - How components work
 - Common repairs
- Lab
 - Changed a tire
 - Checked tire pressure
 - Checked fluid levels
 - Under-hood and under-carriage component identification





[KULR8 News Story](#)

How We Knew We Were Successful

- I liked the class
- This was fun and informative
- I wish I took notes
- I sure did enjoy the visuals
- I had a great time
- Very informative
- I know so little, that I can't even ask questions
- Thank you for offering this and providing pizza



Industry Partners



Phone: 406.245.7269

341 Hickory Dr, Billings MT 59101

Next Steps

- Advanced Automotive Class
 - zSpace—more in-depth with vehicle components
 - Change air filters, windshield wipers & headlight
 - Touch on electrical components
- Future class dates:
 - Oct. 28th Intro
 - Dec. 9th Intro
 - Jan. 6th Advanced
 - March 30th Intro
 - April 20th Intro
 - May 11th Advanced



Be Brave. Be Bold. *Become.*



**CITY
COLLEGE**

MONTANA STATE UNIVERSITY BILLINGS

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Student Panel

Kyla Vande Sandt: Agriculture Vet Science/School-to-work

Noah Dye: Industrial Arts Automotive/School-to-work

Brady Vomund: Family & Consumer Sciences (FCS)

Maya Gentry: Industrial Arts
Woodworking/Carpentry/Construction



Mike Halligan

Executive Director

Dennis and Phyllis Washington Foundation

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Montana Future at Work Awardee Presentations



Flathead Valley Community College-
HVAC & Refrigeration

Helena College-Certificate of
Technical Studies (CTS)

Highlands College- CDL

Missoula College-CNA and Job Site
Ready

Miles Community College- CNA



*Missoula College-
Health Science
Future at Work
Program*

Missoula College- Future at Work

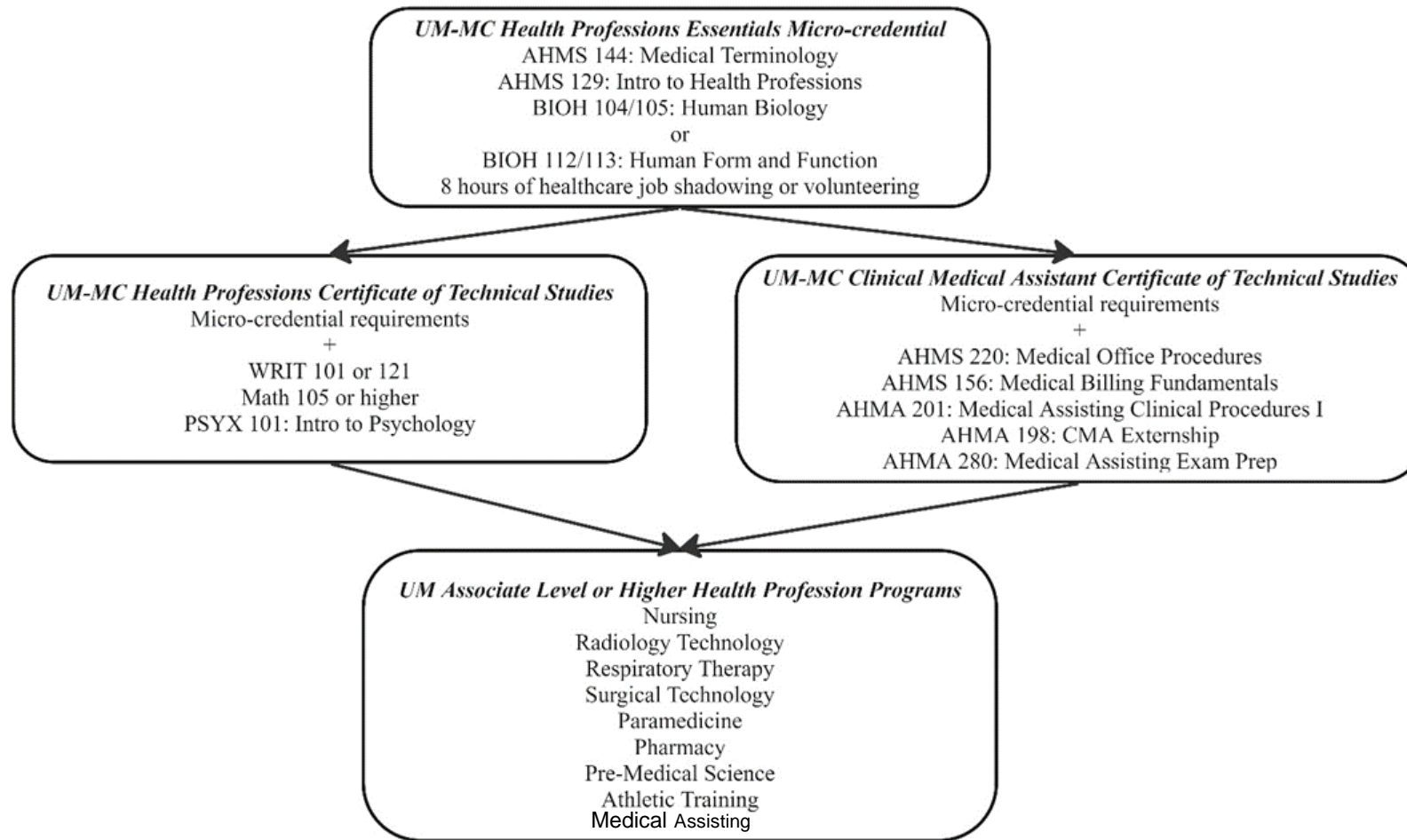
Year 1 Overview

- A certificate of technical studies was created as stackable credential to the Medical Assisting associate's degree.
- Year 1 focused on implementing an online, distance Clinical Medical Assisting program for high school students
- The program was designed with high school stakeholder input to ensure that it would be accessible for high school students
- Worked with Missoula area schools
- 5 students graduated from the program in July.

Year 2 Overview

- We built upon the success and lessons learned in Year 1
- This includes a more comprehensive approach to health science workforce development
- We have added stackable credentials to the MA pathway and are working on building these credentials into health profession associate's degree/bachelor's degree programs
- This semester we have 10 high school students participating in the program
- We are also expanding our partners to include other Western Montana high school and healthcare industry partners

Year 2 Pathway Focus



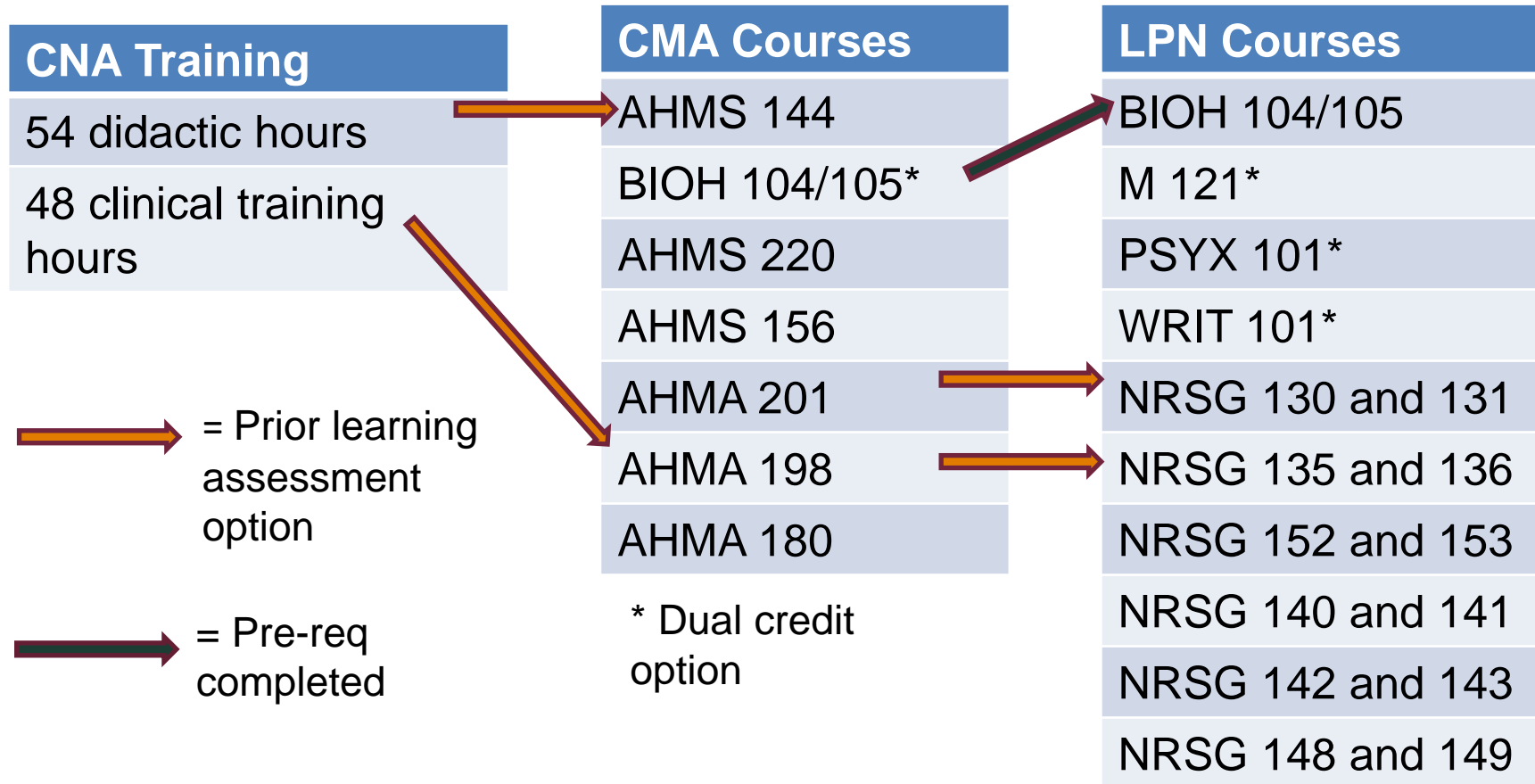
Building a Health Profession Pipeline

Non-Credit Training to Credit Programs

- Year 1 the Missoula College FAW program worked with the UM-Bitterroot FAW program to establish prior learning assessments (PLAs) for CNAs.
- Year 2 continuing to identify PLA opportunities to streamline the healthcare career pathway (i.e., nursing). Focusing on CMA→LPN portion of pathway this year.
- Year 1 mapped out coursework pathway in the nursing field and identified dual-enrollment opportunities
- Year 2 continuing to map out this pathway and build needed program components. Partnering with the new Missoula College LPN-to-RN Bridge program on this.

Grade Level	Health Science Coursework	Healthcare Experience Options	Certification
9 th	Introduction to Health Professions or PLTW Principles of Biomedical Science	<ol style="list-style-type: none"> 1. Job shadowing or volunteering 2. REACH Camp 3. HOSA 4. Dietary or Environmental Services 	N/A
10 th	AHMS 144: Medical Terminology and/or PLTW Human Body Systems	<ol style="list-style-type: none"> 1. Medical Office Assisting 2. Nurse Assisting 3. MedStart Camp 	<ol style="list-style-type: none"> 1. NCOMA 2. CNA
11 th	BIOH 104/105 or 112/113 and/or PLTW Medical Interventions CMA Course Work	<ol style="list-style-type: none"> 1. ECG Technology 2. Phlebotomy 	<ol style="list-style-type: none"> 1. NCET 2. CPT
12 th	WRIT 101: College Writing I and M 121: College Algebra or M 140: College Math for Healthcare Optional PLTW Biomedical Innovations and/or BIOH 201: Human Anatomy & Physiology CMA Course Work	<ol style="list-style-type: none"> 1. Emergency Medical Technology 2. Medical Assisting 3. Biotechnician Assisting 	<ol style="list-style-type: none"> 1. EMT 2. CCMA 3. BACE

Stackable Credentials: Nursing



- Work experience or previous educational experience can be counted towards coursework through PLAs
- All programs can be set up as an apprenticeship
- LPN can be stacked into RN (ASN) program
- CMA program is aligned with 4 year PLTW biomedical science program or other aligned health science CTE programs

Healthcare Apprenticeships

- Year 1 designed a medical assistant apprenticeship program for both high school students and adult learners.
- Year 2 implementing medical assistant apprenticeship program. Currently have 1 high school student completing an apprenticeship at All Nations Health Center.
- Year 2 establishing a pre-apprenticeship program in the health sciences for high school students.

Apprenticeship

- **Healthcare Apprenticeships**

- Work/earn while you learn
- At least 144 hours of classroom instruction paired with at least 2,000 on-the-job training hours
- Structured supervision/mentorship
- Great way to recruit, retain, and increase workforce diversity

- **Example: Medical Assistant**

- Take online courses through Missoula College MA program
- While working as an MA at a healthcare facility

- **Healthcare Pre-apprenticeships**

- Prepare HS students to enter an Apprenticeship Program
- Typically consist of HS dual-credit coursework and some work-based experience
- Students can earn up to 750 hours towards an apprenticeship
- Earn higher wage in apprenticeship program

- **Example: PLTW Biomed Program**

- Takes PBS, HBS, and/or MI
- Job shadows, competes in HOSA, or volunteers in healthcare setting
- Earns up to 750 hours towards MA apprenticeship

Questions?



HIGHLANDS COLLEGE SCHOOL-TO-WORK

Commercial Driver's License (CDL)

- Why
- Who
- What



Road Map To Success

**HIGH SCHOOL
Senior Year
12 Credit Certificate
(APPLY FOR
PROGRAM)**

Submit The Following Documents to Program Coordinator:

- Letter of Intent
- High School Transcript
- 2 Letters of Recommendation

Reviewed by Program Coordinator for admission into the program

Enroll in 2 Dual Enrollment Courses in the Fall and 2 in the Spring

- WRIT 101—College Writing I (3 credits)
- CAPP 131 or 156—Basic MS Office or MS Excel (3 credits)
- 100 Level Math—(3 credits)
- HEO 100 —Commercial Truck Driving – **SPRING** (3 credits)

TOTAL Senior YEAR CREDITS—12

Schedule Written Permit Exam:

Attend At Least Two CDL Study Sessions (in person / virtually) :

Attend Orientation:

- Background Check
- Driving Record Check
- Submit DOT Physical
- Copy of Drivers License
- Go Over CDL Manual

Drug Screen

- Present Drug and Alcohol Policy and have student sign
- Pass Drug Screen
- Enroll Student in Clearing House
- Student consents to query

Enroll Students In JJ - Keller

- 47 online modules
 - Pass with 80%

Schedule Driving Time:

- 20 hours minimum
 - Behind the road
 - Skills

Attend Industry Fair:

Schedule Skills Exam:



Takeaways

- Qualifications
- Success
- Ways To Grow

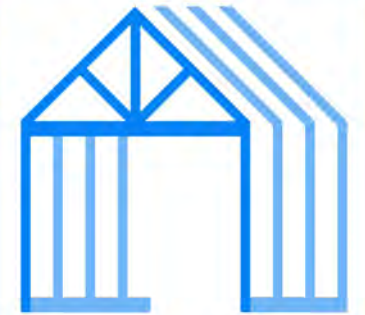


QUESTIONS & DISCUSSION

Job Site Ready Training in Rural Communities

JOHN FREER, MISSOULA COLLEGE

KATHERINE BOOHER, ACCELERATE MONTANA



**JobSite
Ready**

ONLINE + ONSITE

What is Job Site Ready?

- 30-hours online, 15-hours onsite
- OSH 130
- Industry recognized credential
- Partnership with MUS 2-year colleges, TCUs, employers, Dept. of Corrections, high school (non-credit and dual enrollment)





I BUILT THAT.

Development and Implementation

- Ravalli and Missoula counties
- Barriers to offering JSR in rural communities
- Program delivery costs
- Building employer buy-in through successful program pilots





Program Goals

Rural high school
partnerships

30+ students
trained

Employer
partnerships



HVAC&R Fundamentals Career Credential



AIRESERV
HEATING & AIR CONDITIONING
a neighborly company

Bill's Superheat
HEATING AND COOLING PROFESSIONALS



Ryan's
HEATING & AIR INC.
The Comfortable Choice



Heating, Ventilation & Air-Conditioning (HVAC)

Career Credential **CC**



Running Start high school students complete two FVCC courses and a pre-apprenticeship to start a career as an HVAC technician.

RUNNING START
FVCC

- Average starting salary in Montana of \$53,180
- High demand career pathway that sets you up for success from day one
- Tuition paid for by a Montana's Future at Work grant in 2023

To learn more, contact Beth Romain,
Running Start Program Director at
406.756.3923 or runningstart@fvcc.edu.

Flathead Valley
Community College.
fvcc.edu

Upskill, Reskill and Cross-Train

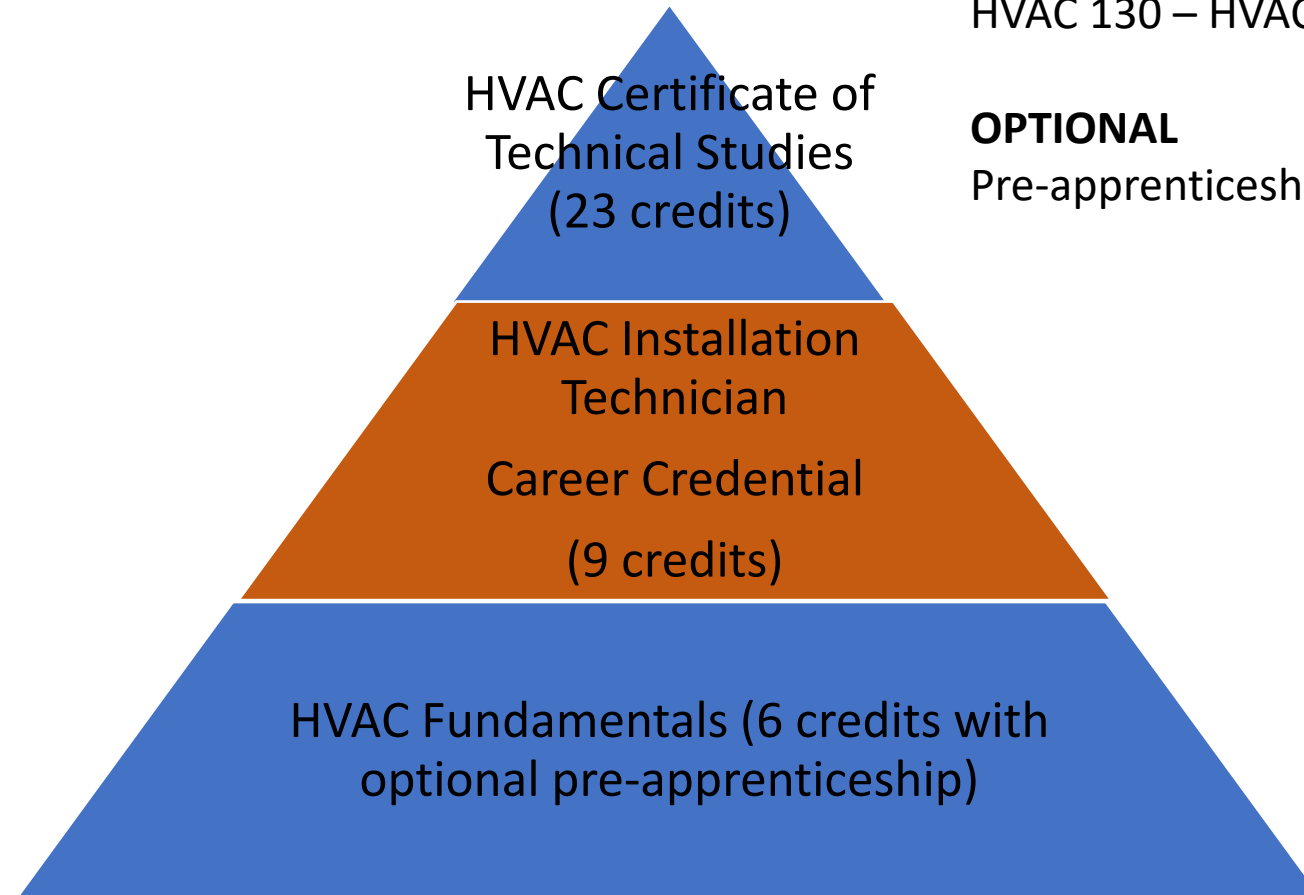
 <p>Degrees and Certificates</p> <p>Prepare for in-demand jobs with hands-on classes using the latest equipment to complete a degree or certificate in one to two years.</p>	 <p>Short-Term Career Credentials</p> <p>Choose from our career-specific credentials and launch your new career in six months or less.</p>	 <p>Apprenticeships and Internships</p> <p>Combine on-the-job training with technical education to build your knowledge and earn higher wages.</p>
 <p>Customized Team Training and Meeting Facilitation</p> <p>PVCC matches your business training objectives with a skilled instructor or industry trainer at your place of business, online or on the PVCC campus.</p>	 <p>Professional Development Workshops</p> <p>Focus on personal growth and development with a learning series to keep your employees growing, thriving and feeling connected.</p>	 <p>Conference and Retreat Planning</p> <p>Get support hosting a conference or large event from registration, catering and IT support to awarding continuing education units.</p>
 <p>Small Business Development Center</p> <p>The Katiqai® Regional Small Business Development Center excels with business counseling, marketing, financial projections, startup assistance and more, free of charge.</p>	 <p>Career Services</p> <p>Post a job or internship, host an intern, set up an information table on campus, or take part in an employer panel.</p>	 <p>Adult Education</p> <p>Earn your high-school equivalency, advance your use of the English language or complete the Applied Services Vocational Applicable Secondary preparatory course.</p>

REQUIRED COURSES

HVAC Fundamentals (2 cr)
HVAC 130 – HVAC Electrical (3 cr)

OPTIONAL

Pre-apprenticeship (1 cr)



HELENA  COLLEGE
UNIVERSITY OF MONTANA



Emergency Medical Technician (ECP 130)

- Offered spring 2023
- 13 high school students participated; 12 completed
- Outcomes:
 - 10/10 students say this class prepared them for their future career & future college classes
 - "I have found my career!"
 - Creation of promotional materials
 - Board of Medical Examiners is proposing a change to administrative rules for ECPs



Emergency Medical Technician (ECP 130)

- Promotion:
 - Healthcare exploration event in October
 - Landing page & interest form
 - High School promotion (Next Grad kiosks, flyers)
- Interest form...student outreach
...interviews
- Orientation
- Class & clinical experience
- Surveys & exit interviews



Emergency Medical Technician

Landing page

https://mailchi.mp/helenacollege.edu/ecp_130



HELENA COLLEGE
UNIVERSITY OF MONTANA

Students will gain:

- Classroom & clinical experience
- Preparation for the NREMT certification exam and professional licensure
- Exposure to the pre-hospital healthcare industry
- A head start on the path to healthcare, fire department, and emergency response careers

Due to grant funding, this class is free for most high school students, including all fees and supplies.

Are you ready to start your healthcare career?

ECP 130 Emergency Medical Technician
Earn 5 college credits that can lead to your EMT license and a meaningful career.

High school students:
for more information about ECP 130 and to sign up, scan the QR code. This class will fill up fast!
bit.ly/hc_ecp130



Service Now Certification

- ServiceNow: low-code, cloud-based platform that simplifies and automates IT management workflows without replacing human employees.
 - 2022 Challenge from Governor Gianforte: all executive State agencies complete transition to ServiceNow by the end of 2023.
 - No training currently exists in Montana = shortage of qualified employees.
 - Partnering with ServiceNow to implement curriculum and training to lead to 2 ServiceNow industry credentials.
 - Entry into workforce and continuing education.

servicenow®

ServiceNow Administration & Development CTS

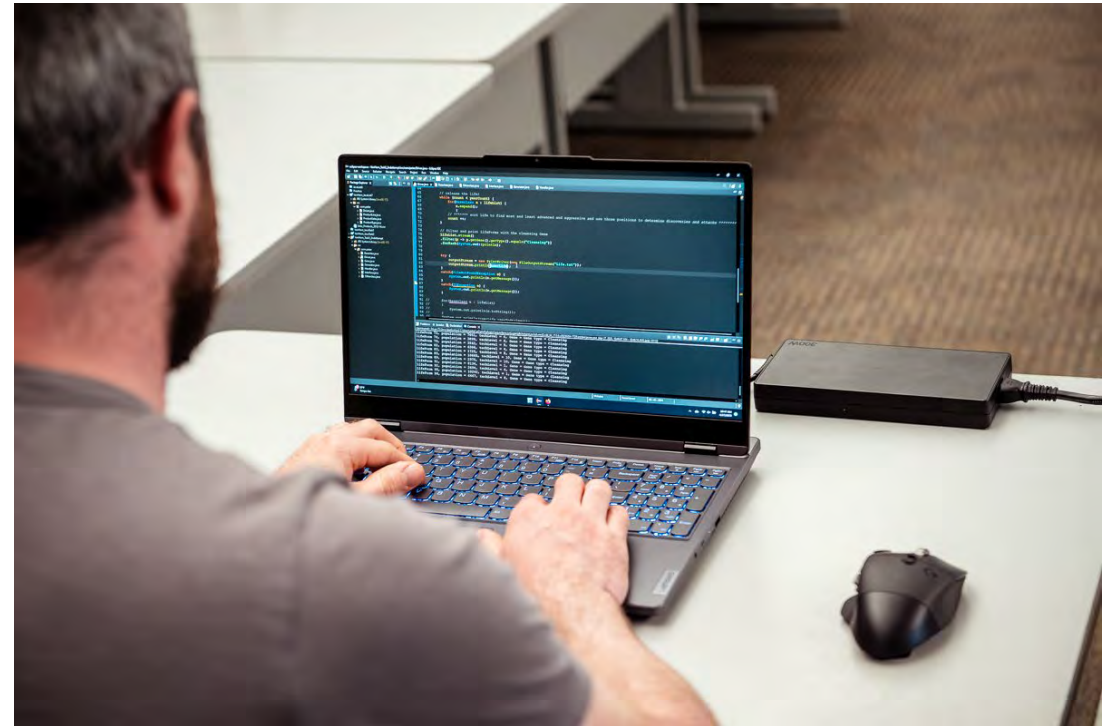
- New Certificate of Technical Studies
- 16-credit stackable credential
 - ServiceNow curriculum in 2 CSCI 291 Special Topics courses
 - CSCI 100 Intro to Programming
 - CSCI 240 Databases and SQL
 - CSCI 211 Client Side Programming
 - ITS 289 Professional Certification
- Offered over Spring and Summer 2024 semesters
- Can be offered in one semester moving forward



Grant Funding

- 12 high school students completing dual enrollment courses
 - Recruiting now.
- 12 laptops to be used by students in the program this year
- Marketing and promotion of the program
- ServiceNow Certification for the IT faculty at Helena College

Thank you for supporting this exciting new program!





HELENA COLLEGE
UNIVERSITY OF MONTANA

MILES COMMUNITY COLLEGE

CERTIFIED NURSING ASSISTANT | DUAL ENROLLMENT PROGRAM



CNA PROGRAM MODEL HISTORY

- Miles Community College has had a credit-bearing CNA course since 2015
 - Developed through the HealthCARE MT/TAACCT 4 grant award (Trade Adjustment Assistance Community College and Career Training)
 - 3 credit online lecture, 1 credit clinical
 - 8 week course, multiple start dates per year
- Was initially designed for local students only, with clinicals in the MCC Nursing Arts Lab and a local healthcare/long term care facility
 - Also select local partners developed through the grant
- Continually received questions about ability to complete it remotely/at a local facility

START HERE — *Go Anywhere*

DUAL ENROLLMENT EXPANSION

- Free 2 Explore – MCC’s answer to One 2 Free – created exponential growth in early start dual enrollment
- Every year, requests for CTE dual enrollment opportunities have increased
 - More and more high schools creating career pathway or career academic, or work release models
 - CNA class is meeting two needs – exploration opportunity for further healthcare education/training, and a credential/paying job opportunity that is open to high school students
- The pandemic exacerbated healthcare worker shortages
 - Significant, ongoing need for CNAs, particularly in long term care facilities

START HERE – *Go Anywhere*

PARTNERSHIP MODEL

- MCC provides 3 credits of online instruction
 - Approximately 45 hours of instruction
 - Online Learning Management System + textbook
- Clinical/hands on training experience, when offered through a workforce partner, is not-for-credit
 - Approximately 30 hours of hands on training, with 16 hours of supervised practical training
 - Completion of DPHHS Nurse Aid Skill Competency Checklist
- The Future At Work Grant has allowed us to make this totally free to students and schools, paying for course fees, textbooks, facility requirements such as background checks and drug screenings, and the Headmaster exam fee – removing the cost barriers allows more to earn an industry-recognized credential and more readily meet local workforce needs

START HERE – *Go Anywhere*

PARTNERSHIP MODEL BENEFITS

- Accessible, flexible model of training
 - Online theory course can be accessed at a time-of-day convenient to the student
 - Clinicals can be scheduled in a way that works for the high school and the local facility/trainer
 - Examples – running concurrently or consecutively with the online course, weekday afternoons or weekends, etc.
- Makes conscientious use of limited training funds and resources, at MCC and the partner facility
 - MCC does not need to hire an instructor in every location (which would likely necessitate minimum enrollment numbers, a barrier in smaller locations)
 - A healthcare facility does not have to pull a staff member offline, when they are already short-staffed, to conduct the full training program
- Creates a local workforce for local facilities

START HERE – *Go Anywhere*

Education Design Labs

Dr. Lisa Larson, Sr. VP College Transformation

Naomi Boyer, Sr. VP Digital Transformation



Education Design Lab

**Montana's Micro-Pathway
Program:**

Year to Career

September 2023



About the Lab

We co-design, test, and build new models and approaches to better address program **affordability**, **relevance**, **portability**, and **visibility** in a rapidly changing knowledge economy.

1,150+

Colleges
+ Universities
+ Organizations

950+

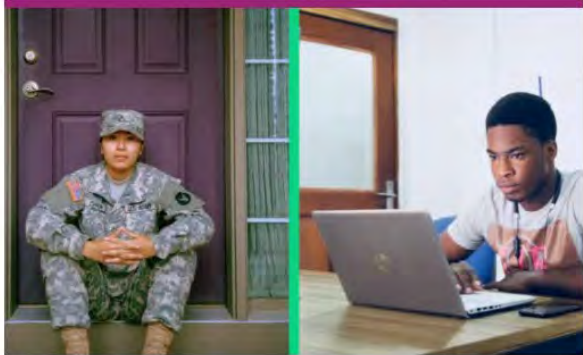
Employers

24+

Ecosystems

States, systems, cities

Some Examples: (L)earner-Centric Innovation enables the shift



XCredit

Validating a learner's life and working experiences as currency for future opportunities



Community College Growth Engine Fund

Leading the nation and their regions in creating micro-pathways with employers.



BRIDGES Rural

Building Rural Innovation, Designing Educational Strategies (BRIDGES): How might we strengthen the capacity of rural community colleges to serve as critical economic growth engines for their learners and communities?



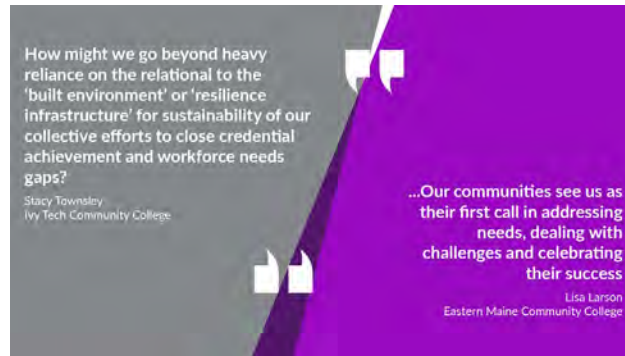
Single Moms Success

How might community colleges dramatically improve completion rates for single mothers by intentionally addressing the unique needs of this population?



Propel Polk!

A first-in-the-nation pilot to teach 21st century skills to Polk County (Florida) high school students, who will receive digital micro-credentials for their resumes.



DIR

How might we reimagine the role of higher education institutions to meet the needs of learners in a new regional economy?



Seamless Transfer Pathways

How might community colleges and four-year universities dramatically improve transfer and graduation rates by reframing the end-to-end experience from the student's point of view?



Wellspring

Wellspring, a multi-phase project sponsored and led by IMS Global Learning Consortium, is focused on advancing the education-to-employment digital ecosystem by improving the information flow between candidates' competency-based learner records and employers' skills-based talent systems...



Overview of Community College Growth Engine



Learner-centered design has never been more crucial.

To build a more equitable future, we must design education systems that support new majority learners' engagement in their learning.

The “Design Accelerator” Question

How might we design **equitable** and **accessible** micro-pathways toward **high-growth** careers **endorsed by employers** and **visible to learners** moving from post-secondary education into the workforce?

CCGE Cohorts

Cohort I - 9 colleges

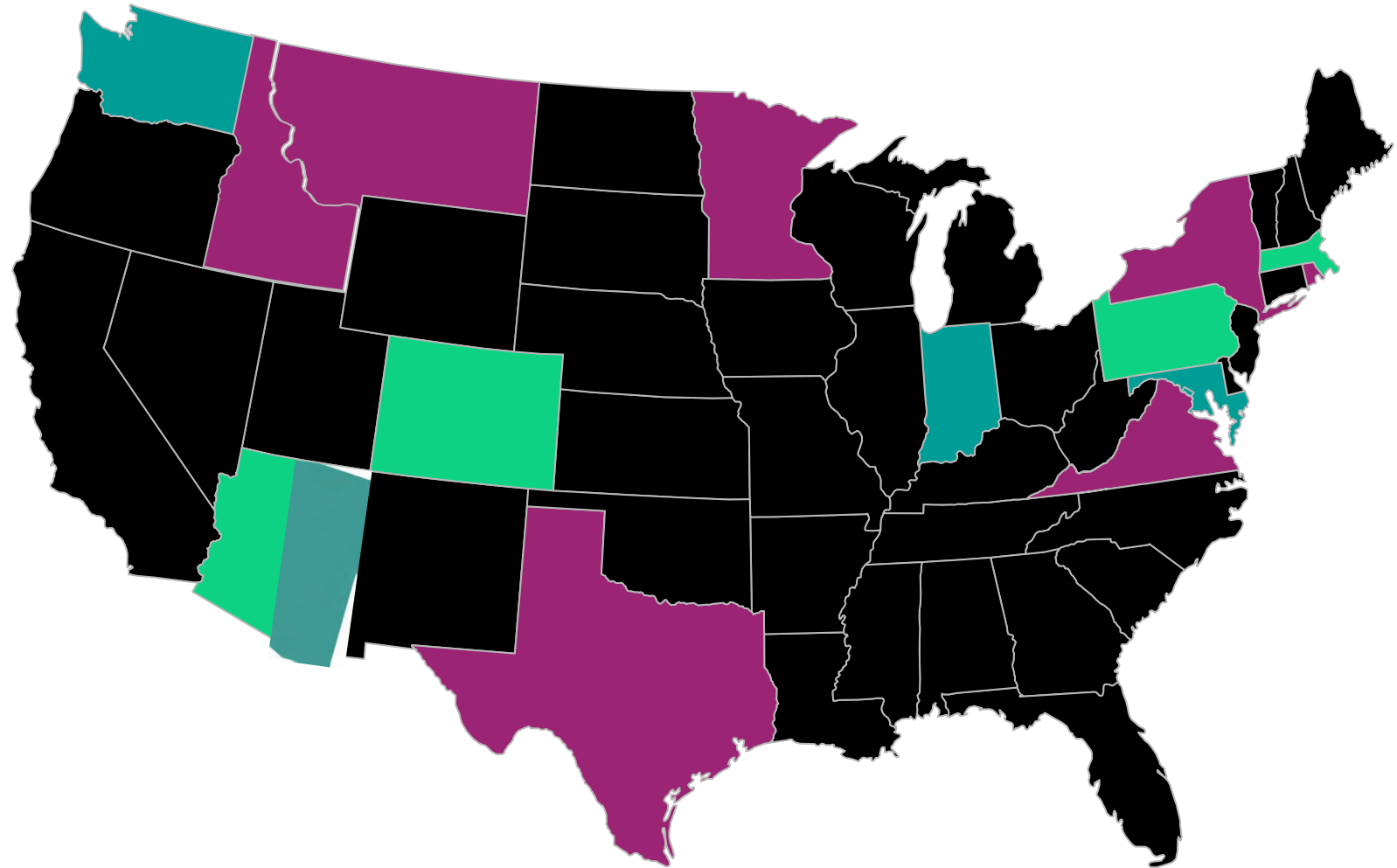
1. Austin Community College
2. City University of New York (4)
3. Ivy Tech Community College
4. Pima Community College
5. Prince George's Community College
6. Seattle Colleges

Cohort II - 13 colleges

1. Bunker Hill Community College
2. Community College of Philadelphia
3. Colorado Community College System(7)
4. Maricopa Community Colleges (4)

Cohort III: 30 colleges

1. **Minnesota State Colleges (4)**
2. **State University of New York (SUNY) (6)**
3. **College of Eastern Idaho**
4. **Community College of Rhode Island**
5. **Alamo Colleges District (5)**
6. **Northern Virginia Community College**
7. **Montana State System (12)**

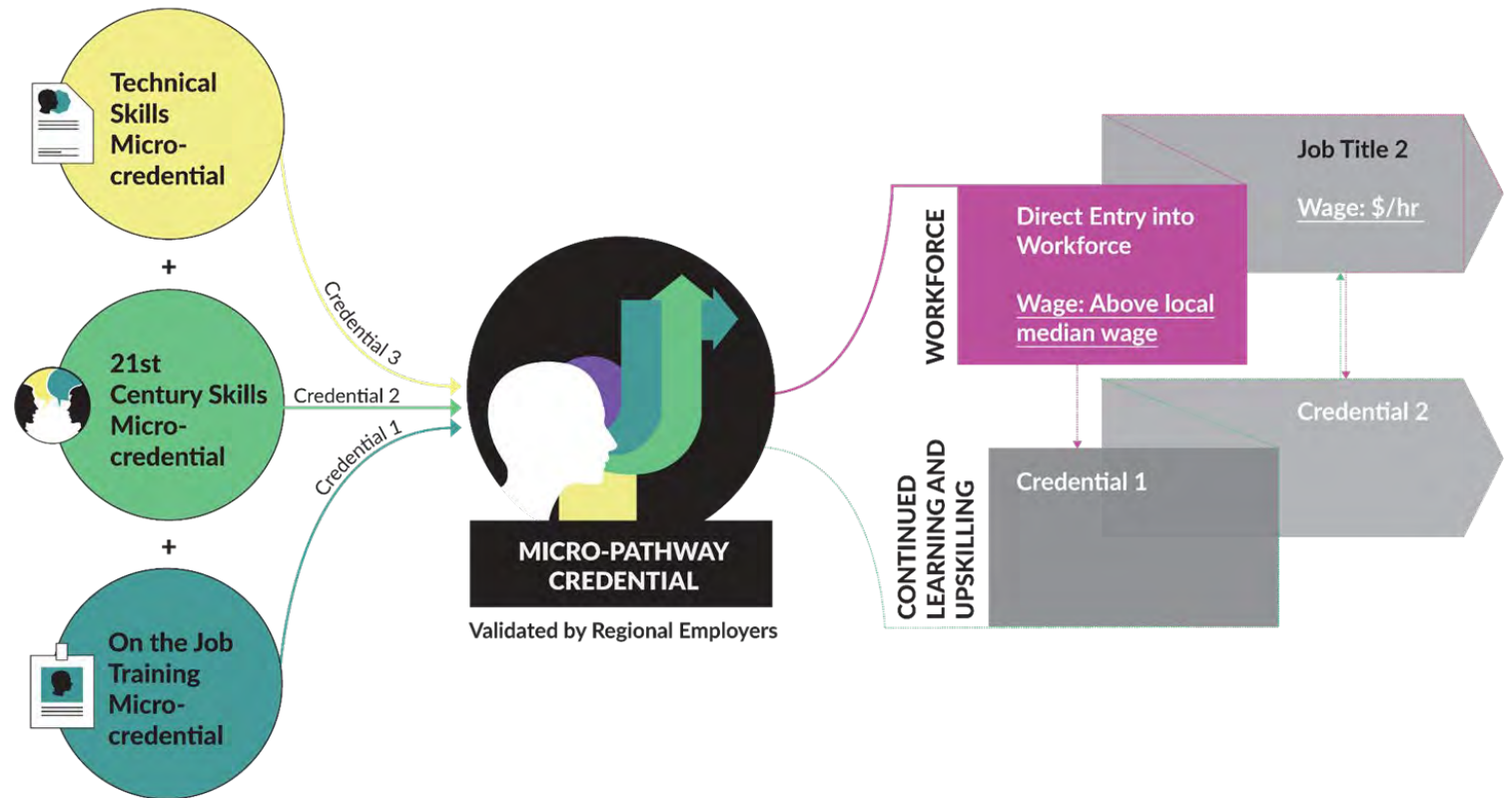


Defining Micro-pathways

In this new time, we need a new class of credential that is more aligned to the market, designed for learner needs, and faster than traditional offerings...

Micro-pathways:

A new model to better address program **affordability, flexibility, relevance, portability, and visibility** to meet the needs of a rapidly changing knowledge economy.



Colorado Community College System Behavioral Health- Patient Navigation

A Micro-Pathway to Become a Patient Navigator

DRAFT



SUMMARY: The Patient Navigator micro-pathway prepares students to support clients in identifying resources as well as navigating behavioral healthcare services and systems. Patient navigators will focus on promoting client health and wellbeing.

CREDENTIALS EARNED

- 2 semesters | [CREDIT/ NONCREDIT] | 9 credits apply towards higher credentials



SOC 1001: Intro to Sociology



COM 1250: Interpersonal Communication



HPR 1000: Intro to Health



21ST CENTURY SKILL

Empathy

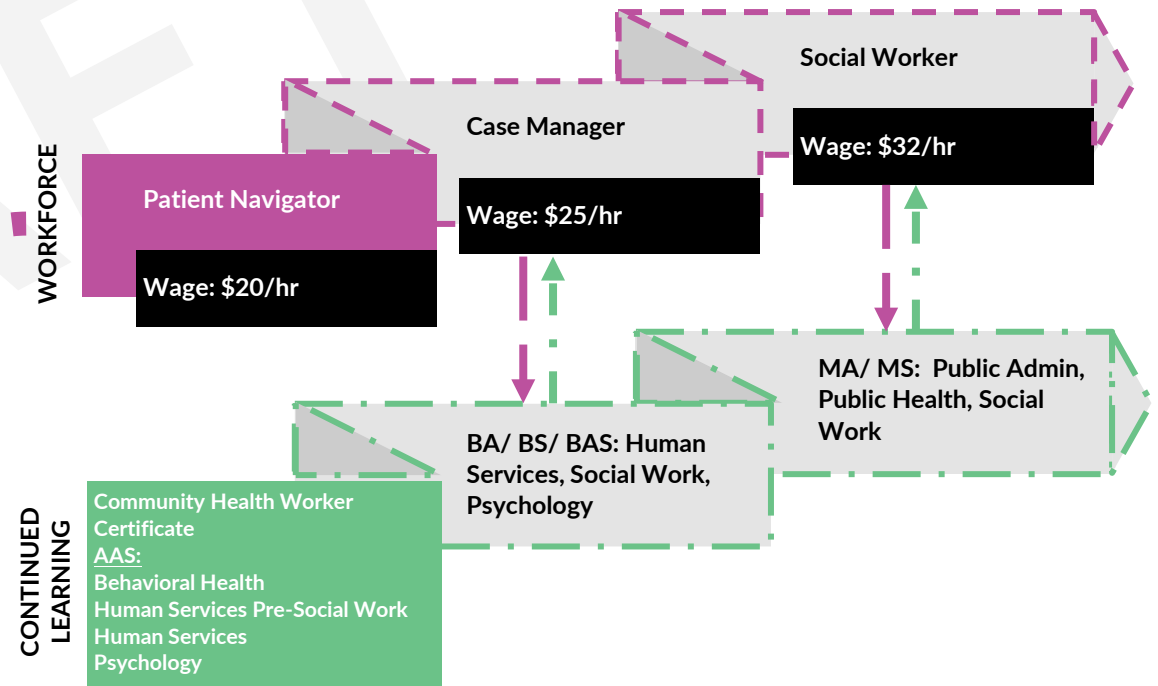


Behavioral Health- Patient Navigator

TOP SKILLS:

1. Empathy and Cultural Competency
2. CPR and Assessment of Basic Vital Signs
3. Understanding of Behavioral Healthcare Systems
4. Exceptional Interpersonal Communication Skills
5. Boundaries around Self-Disclosure

FUTURE GROWTH OPPORTUNITIES



Ivy Tech Community College's Smart Manufacturing Digital Integration Micro-pathway

A Micro-Pathway to Become an Electro/Mechanical Manufacturing Technician

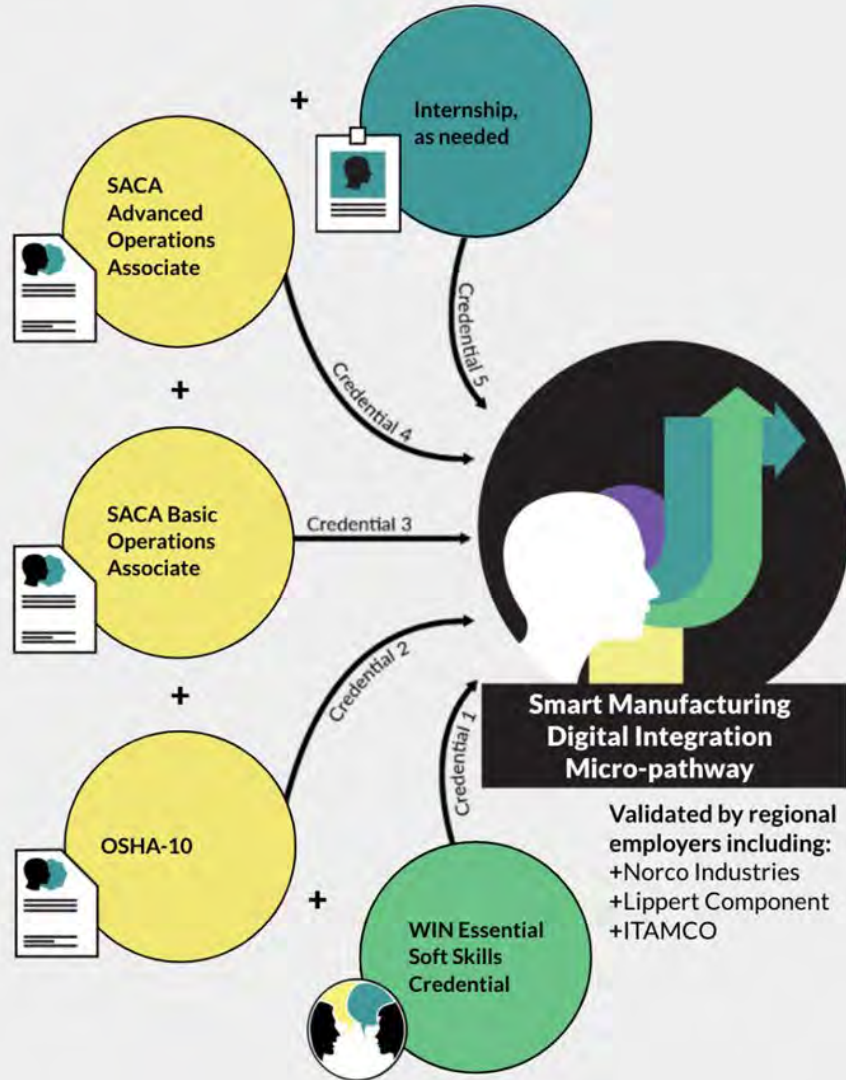
CREDENTIALS EARNED

4 months, full-time/part-time

Offered in both noncredit + credit

6 credits apply to higher Credentials

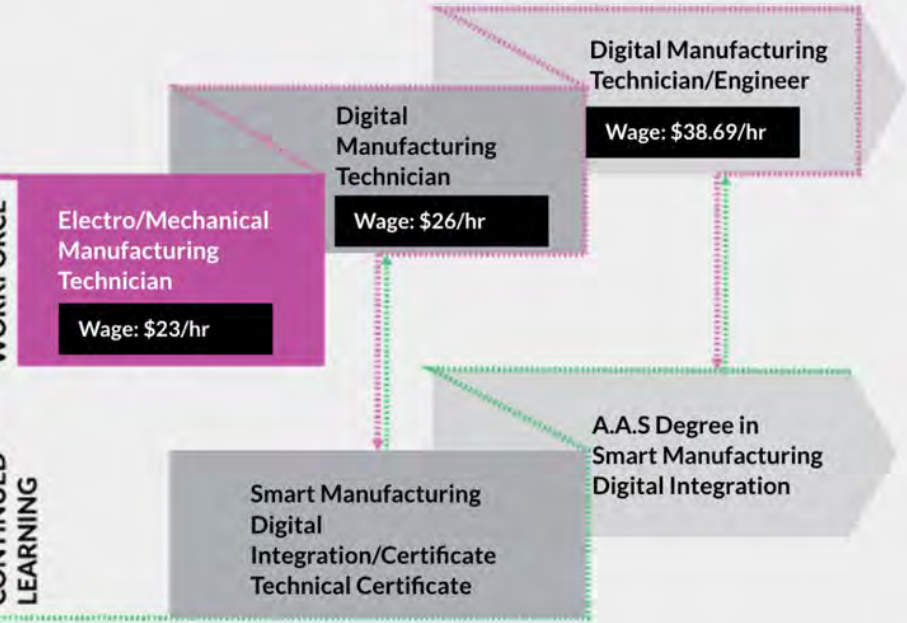
Validated by regional employers including:
 +Norco Industries
 +Lippert Component
 +ITAMCO



FUTURE GROWTH OPPORTUNITIES

WORKFORCE

CONTINUED LEARNING



Legend



2+ Stackable Credentials
 Credentials + Courses articulate to Credit
 Credits count towards a Degree.



21st Century Skills Digital Micro-Credential



Technical Skills Credential



Work Based Learning



Direct Entry into Workforce



Continued Learning and Upskilling Opportunities



Bunker Hill Community College: Junior Cybersecurity Analyst

A Micro-Pathway to Become a Junior Cybersecurity Analyst

Issued by

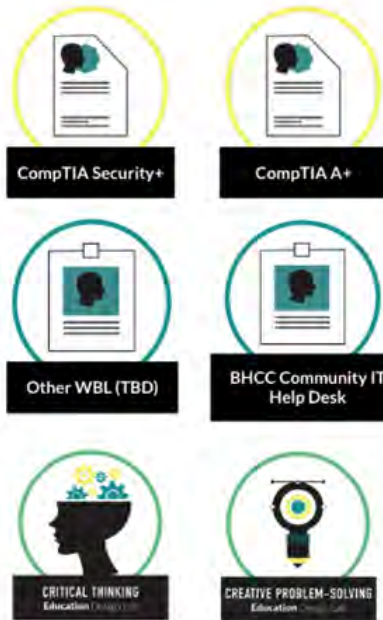


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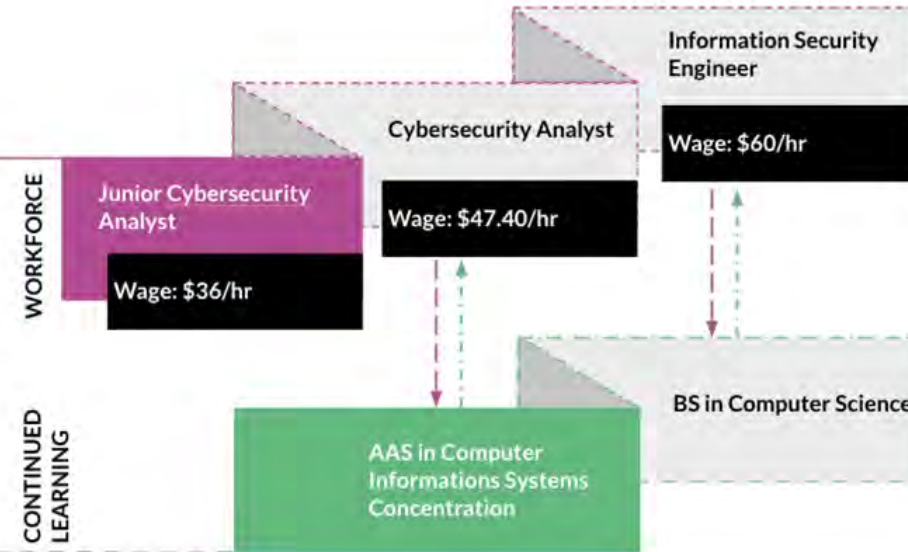


CREDENTIALS EARNED

- 5-7 months full-time/part-time
- Offered in non-credit
- 3 credits apply towards higher credentials



FUTURE GROWTH OPPORTUNITIES



Legend





Microcredentials

#Micropathways

Education Design Lab

21st century skills, defined

Employability skills



Durable skills

Power skills



Soft skills

Essential skills

Human skills

Anatomy of a Micro-Credential

Gather + Assess

Relevant Information

Ground problem-solving in facts rather than assertions.



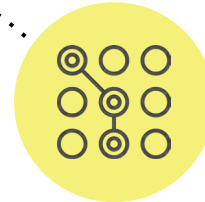
Question Assumptions

Resist easy answers; probe more deeply; and improve the problem solving process.



Identify Patterns

Make sense of data; Recognize commonalities among seemingly unrelated situations.

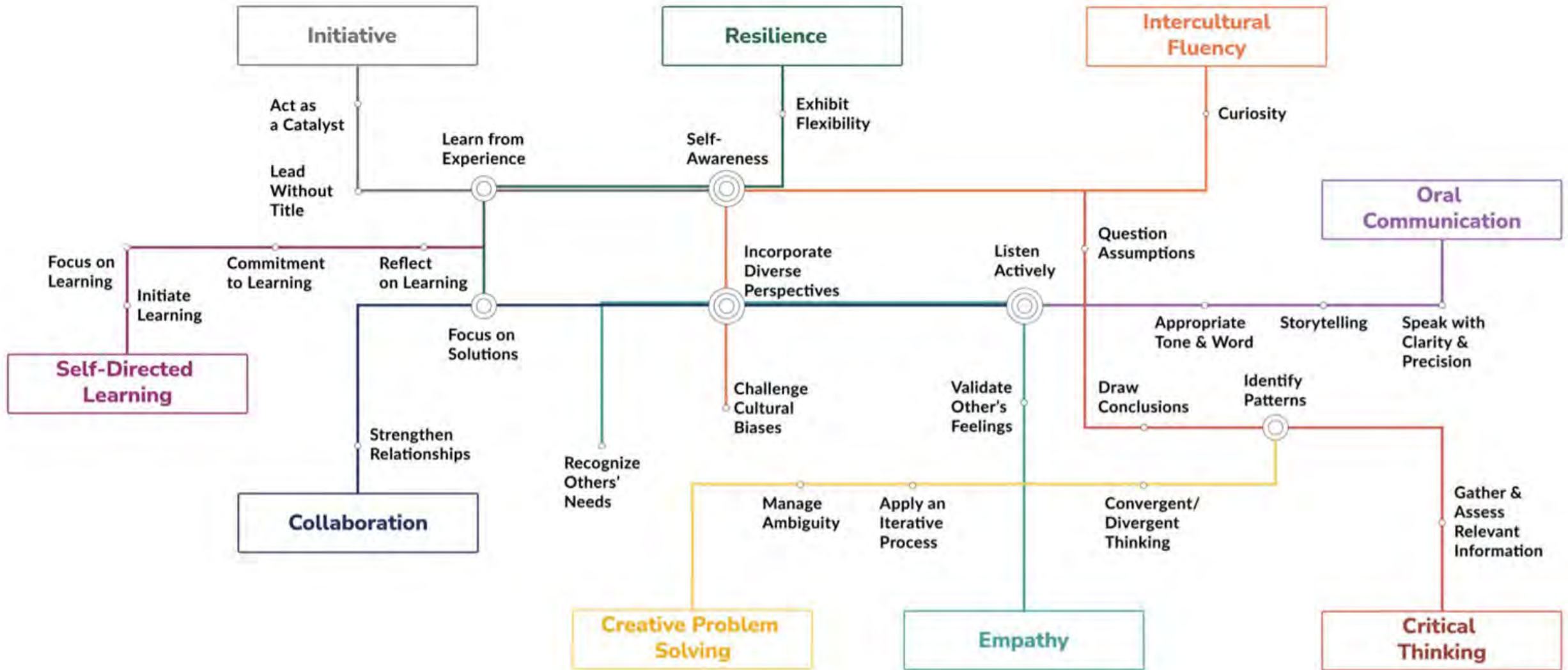


Draw Conclusions

Using logic and reasoning to evaluate arguments, form judgments, and make recommendations.



Sub-competency map



Micro-credentials and Digital Badges



Digital micro-credential: A narrowly focused learning and/or assessment experience, often done online, typically in under a year, which verifies that a specific set of competencies have been achieved



Digital badge: the physical asset learners earn upon successfully completing a micro-credential, which includes the below features

Recognition of
Achievement

Links to
Competencies

Contains
Meta Data

Open Standards

Shareable

Verifiable

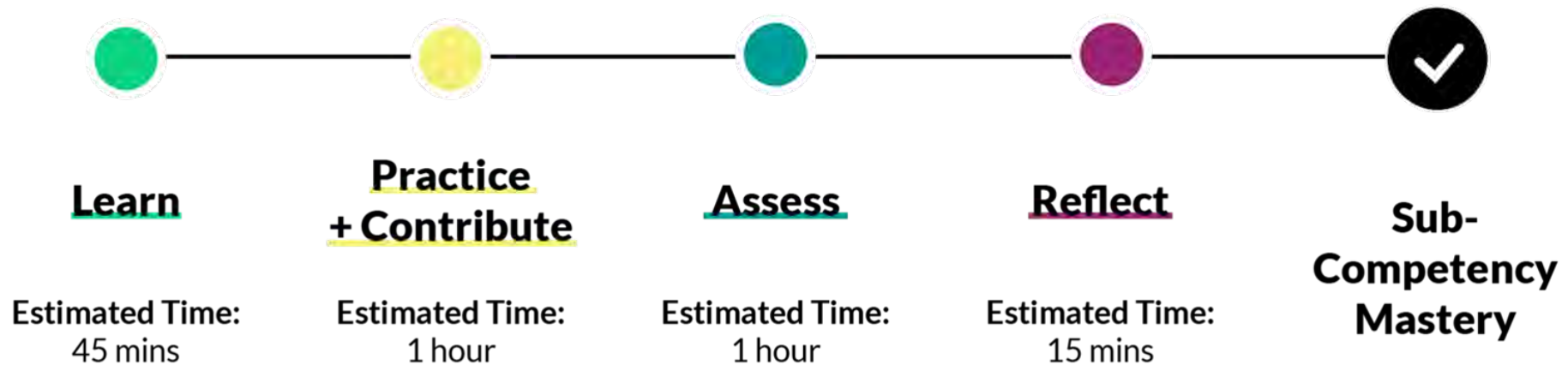
Stackable

Discoverable

21st Century Skill Learning Philosophy

- > Module Overview
- > Learn
- > Practice + Contribute
- > **Assess**
- > Reflect

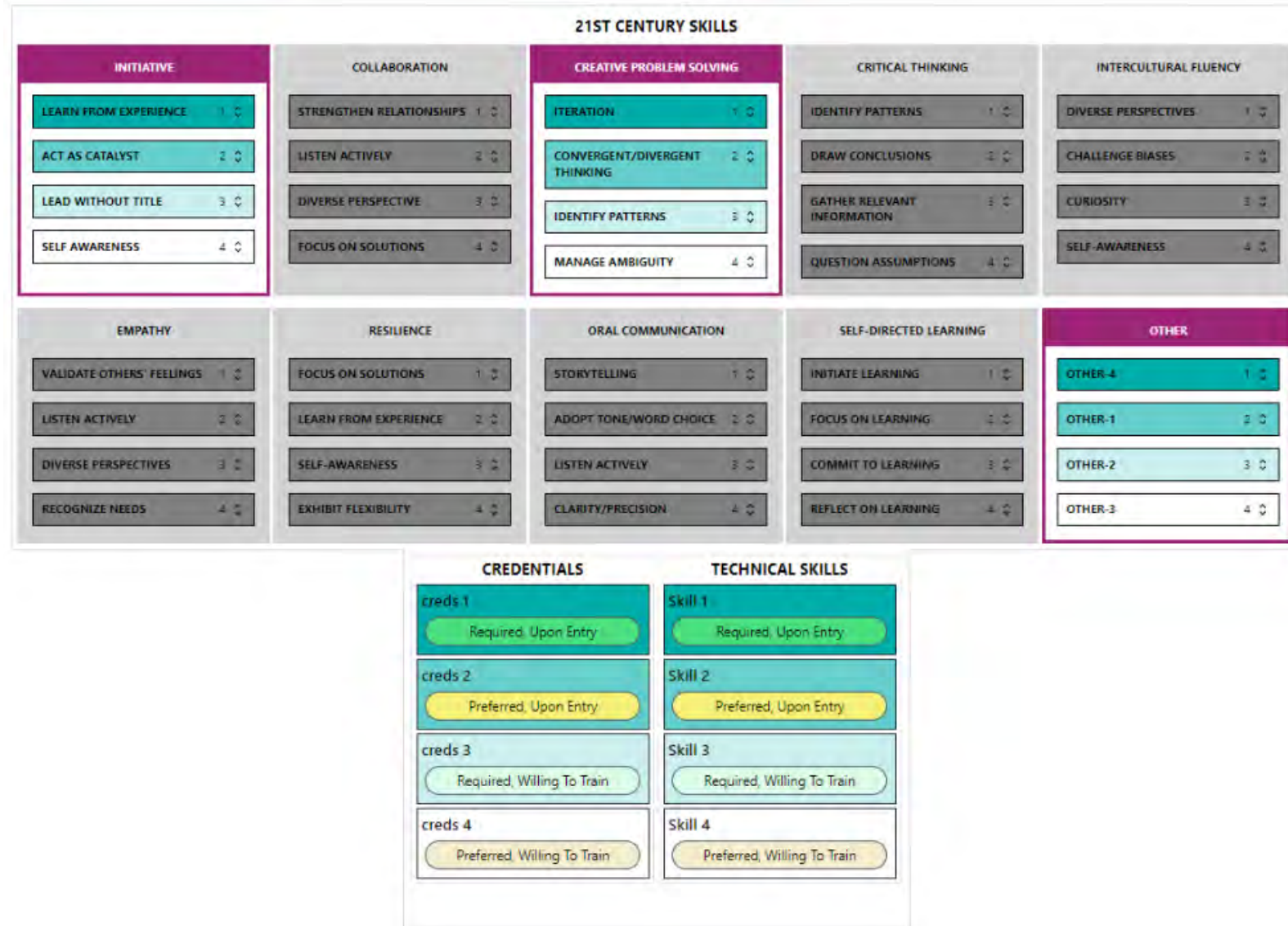
x 4



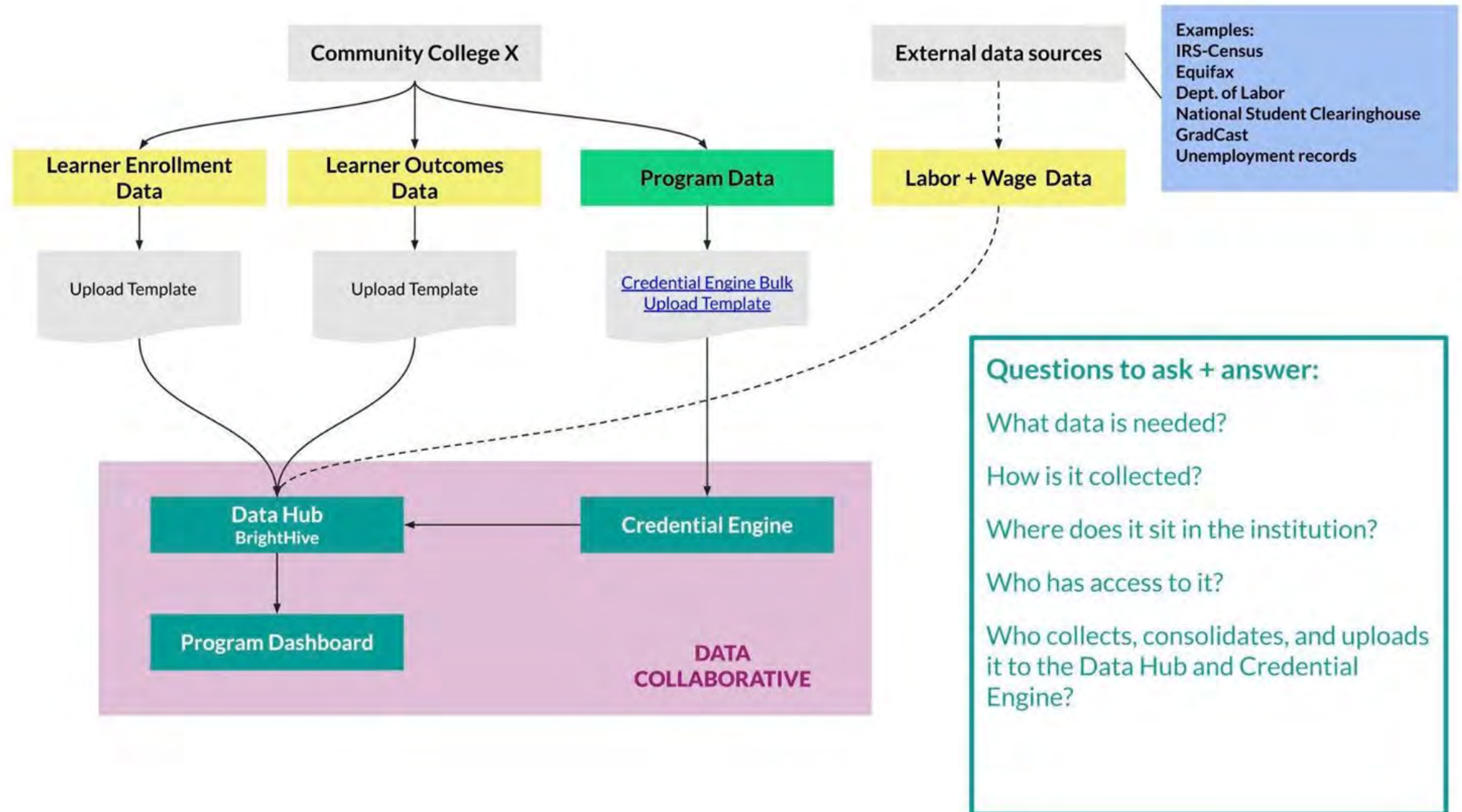
Description of T-Profile


The T-Profile is a **visual construct** representing the optimal combination of 21st century and technical skills for a specified job.

- Allows employers to be honest and precise about the **ideal combination of skills** for their specific job roles
- Institutions can understand what employers need for specific job roles and **prepare their learners** with targeted, in-demand skills



Data Collaborative- Understanding Impact of Short-Term Creds

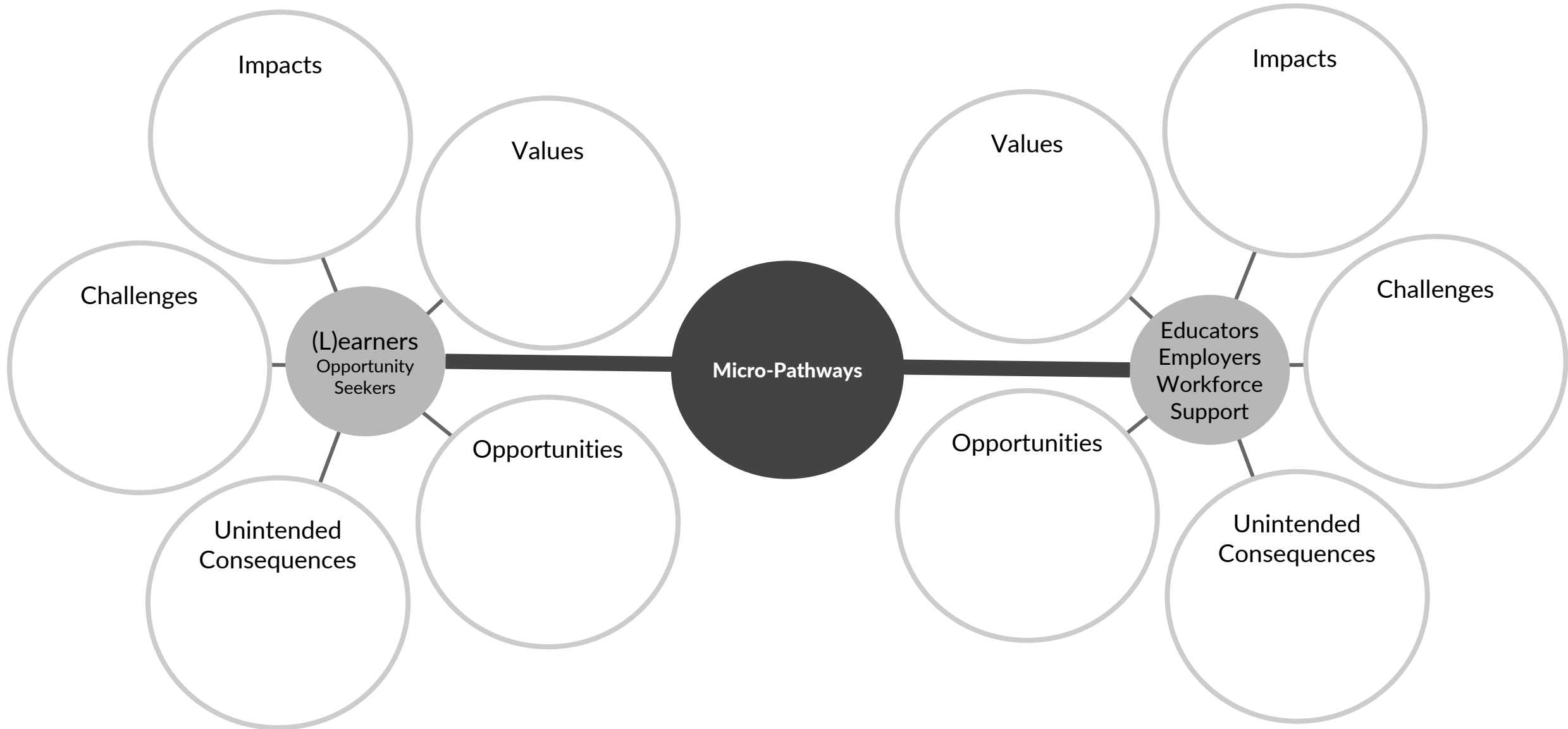




Shared Identity: Understand Each Others Wants + Needs

Think Like A Futurist

What impacts and opportunities would successful implementation of Guided Pathways bring to the future of community colleges?



Educators

1. What are the opportunities and barriers to producing skilled Montana talent?
1. What programming are you hoping to design to respond to learner and industry needs?

Employers

1. What are the opportunities and barriers for identifying talent?
1. What types of employees are you most in need of?

Workforce Support

1. What are the opportunities and barriers to placing those who are unemployed in Montana?
1. What are the high need, high wage job roles that are difficult to fill?

Post It Note Reflections: Values

Train your own to encourage retention	Competencies
Employer- shared knowledge	Focus and Flexibility
Employer-Alignment	Purpose and Feeling of Accomplishment and Confidence
Rapid training	Increased value to industry and students
Training with learning outcomes the employers care about	The person is employable
Money - Affordability	Location
Schedule - meet the learner where they are at	Autonomy
Work/life balance	Community sustainability
Economic development	Keep more paying opportunities in town
Credit for Prior Learning and Experiences	Time

Post It Note Reflections: Opportunities

Rural communities have more access to more careers	Employers- Relevance
Training for those that want to enter the workforce quickly	Employers- Higher Wages
Career are available to more students	Already existing content rebundled
Employer- Uniformity across educators, learners, and employers	Lots of on and off ramps
Willingness to grow- see the need and benefit	Bar is currently low- understanding easy to raise the bar
Stackable credentials	Programs can incorporate in careers in meaningful ways
Nimble	System Uniformity and More course choices
Advancement (x2)	More money
Stay local and still advance	Growth
Better community	Increase a person's \$\$ (make money)
Additional \$\$ in the community	Career exploration

Post It Note Reflections: Opportunities

Learn diverse skills quickly

Visible Pathways and Career Opportunities

Career and Community retention

Targeted learning

Documentation of Skills

Clear Pathways in Skill Attainment and
Career Advancement

More career options

21st Century Skills transfer across jobs

Collaboration with employers

Post It Note Reflections: Challenges

Employers-Collective Bargaining	Teaching staff availability	Employer- Trainee costs	No one believes the "micro"
Employees Seeing Rewards for getting certified	Over credentialing (do they have meaning)?	Employer- how much training is enough training "certify"?	Funding
Employer understanding + buy-in, mabe company PD	Employer- Educating the stakeholders	Educating the stakeholders	Recruitment
Employer Recognize the value of the credential	Employer- connecting all stakeholders with 1 voice	Connecting all stakeholders with one voice	Not nimble
Educators Not enough educators to deliver the information	Employer- Geography	Employer- Funding	Alignment with learners and employers
Money opportunities within their community	Access	Expanding job growth	Location
Relationships	Networking	Time	Availability
Partners	Marketing and Outreach	Learners understanding impotence of microcreds	

Post It Note Reflections: Unintended Consequences

Balance of work and learning	Complexity may be misunderstood by key partners
Competitive - recruitment of learners	Make College obsolete?
Are salaries commensurate with knowledge?	Pick the degree apart until it doesn't matter? Over credentialing
Some learners/workers need social supports and may have a period of transition where they are making too much to qualify and still need supports	Deferred enrollment in higher ed
Too many cooks in the kitchen and multiple initiatives	College KPI's and funding is tied to degree completion
Random acts of DE	Right fit for Individual
Employers have to pay more	Fewer seasonal workers due to full time employees
Doesn't broaden horizons - narrow Focus	Becoming stagnant

Post It Note Reflections: Impacts

Filled jobs- reduced needs for employers	No or low student loan debt for students
Employer- more kids stay in IT	Decreased student debt
Shared language between industry and education	Earning sooner with not debt
Working together is the most impactful	Better prepared workforce
Transferability and portability	Workforce alignment (x2)
Pipelines	Community Resources
Academics	Access
Economic	Schools
Culture	Family

Post It Note Reflections: Impacts

Passionate Teachers	Employers understand benefits of education
Access to courses not currently available	21st Century Skill Development
Meeting basic human needs	More options for employment without a long commitment to education/training
Self actualization	Confidence
Potential low or no income while earning micro-pathway	Work based learning opportunities
Individuals better understanding their passions	Higher wages
Improve post secondary responsiveness to program development	More on and off ramps
Recognition of Skills and Standards	
Training that includes learning outcomes that employers care about	

Reflections: Share Your Persona

What surprises you? What resonates?

What are the opportunities?

What challenges stand out?

What are the connection points?

Thank You!

To learn more about the Education Design Lab and to sign up for our Innovator Network, please visit eddesignlab.org.

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Wrapping up Day 1

- 4:00 Tour Red Lodge CTE Facility
- 5:00 Reception at the Pollard (Hosted by Education Design Labs)

