

# Consolidated Annual Report, Program Year 2021 - 2022 Montana

## **2a: Narrative Performance: Implementation of State Leadership Activities**

---

### **A. Describe your process and priorities in making funds available to serve individuals in State institutions, such as State correctional institutions, juvenile justice facilities, and educational institutions that serve individuals with disabilities. (Section 112(a)(2)(A) of Perkins V)**

In the 2021-2022 grant cycle, \$6,275 was available to serve individuals in State institutions. The Office of the Commissioner of Higher Education received applications from Montana Correctional Enterprises (MCE) for funding the Montana State Prison, the Montana Women's Prison, and Pine Hills School correctional facility. All applications were granted awards.

MCEs used \$2,092 to purchase one subscription for AllData, which is a program used in Automotive Maintenance courses. The program helps students learn technical knowledge that compliments the hands-on experience in their courses. The software also provides technical and training support to help students obtain industry recognized credentials in AllData.

\$2,091 was used for the Montana Women's Prison to provide work stations for offenders to earn Adobe and/or Microsoft certifications. The women that completed the certifications also attended and completed a job readiness program, helping with career goals and pathways.

\$2,092 was used for the Pine Hills school to purchase equipment in programs for students learn new skills. Courses supported included Culinary Arts, Welding, Construction, and Horticulture.

Suggested uses of funds listed in the Application Guide/RFP for institutions included:

- Strengthen current CTE programs at the institution
- Develop and implement new CTE programs at the institution
- Provide professional development opportunities for CTE instructors at the institution
- Secure services from educational agencies which are under contract with the recipient agency to provide CTE programs to individuals who are in correctional institutions.

### **B. Describe your major accomplishments as a result of using State leadership funds for required activities in the following four key areas to improve career and technical education (CTE)—**

- i. **Preparation for non-traditional fields in current and emerging professions, programs for special populations, and other activities that expose students, including special populations, to high-skill, high-wage, and in-demand occupations.**
- ii. **Support for individuals in State institutions, such as State correctional institutions, including juvenile justice facilities, and educational institutions that serve individuals with disabilities.**
- iii. **Recruiting, preparing, or retraining career and technical education teachers, faculty, specialized instructional support personnel, or paraprofessionals, such as preservice, professional development, or leadership development programs.**
- iv. **Providing technical assistance for eligible recipients.**

**(Sections 112(a)(2)(B) and 124(a)(1) of Perkins V)**

#### **State and Postsecondary Response:**

i) The Office of the Commissioner of Higher Education issued a request for proposals targeting nontraditional occupations CTE programs of study. Priority occupations for the purpose of the RFP were Nursing/Allied Health and Early Childhood Education/Teaching K-3 for male students and STEM, Manufacturing and Trades, Construction and Architecture, and Culinary for female students. Applications demonstrating collaboration between secondary and postsecondary institutions or between two or more postsecondary institutions were given preference.

Flathead Valley Community College (FVCC) hosted three Women in Welding workshops at full capacity, serving 27 women in each session. FVCC also used funds to create career exploration videos in trades fields showcasing female

students studying trades, and female professionals working in those fields.

Gallatin College delivered two versions of a Women in Technology workshop to high school students/community members, and high school instructors. Seven participants ages 15-22 completed the three-day workshop, engaging in instruction on IT Network Technology, Cybersecurity, Drafting/CAD Technology, and Photonics/Laser Technology. Two of the program directors are female and spoke directly to the importance of women in these fields and ways to overcome potential challenges. Three participants joined the session for high school instructors, exploring way to incorporate provided technical education and diversity enhancing tips into their courses and classrooms. They also learned about local companies in technology and their demand for skilled employees.

ii) In the 2021-2022 grant cycle, \$6,275 was available to serve individuals in State institutions. The Office of the Commissioner of Higher Education received applications from Montana Correctional Enterprises (MCE) for funding the Montana State Prison, the Montana Women's Prison, and Pine Hills School correctional facility. All applications were granted awards.

MCEs used \$2,092 to purchase one subscription for AllData, which is a program used in Automotive Maintenance courses. The program helps students learn technical knowledge that compliments the hands-on experience in their courses. The software also provides technical and training support to help students obtain industry recognized credentials in AllData.

\$2,091 was used for the Montana Women's Prison to provide work stations for offenders to earn Adobe and/or Microsoft certifications. The women that completed the certifications also attended and completed a job readiness program, helping with career goals and pathways.

\$2,092 was used for the Pine Hills school to purchase equipment in programs for students learn new skills. Courses supported included Culinary Arts, Welding, Construction, and Horticulture.

Suggested uses of funds listed in the Application Guide/RFP for institutions included:

- Strengthen current CTE programs at the institution
- Develop and implement new CTE programs at the institution
- Provide professional development opportunities for CTE instructors at the institution
- Secure services from educational agencies which are under contract with the recipient agency to provide CTE programs to individuals who are in correctional institutions.

iii) Professional development is provided to faculty and CTE staff across the state, including a certification for teaching Vascular Ultrasound at City College; NC3 membership for faculty at Dawson Community College; a Dual Enrollment Summit for High School Teachers at Dawson Community College; attendance to the NACTE Conference, Montana Xli Extended Learning Conference, and the PTA Credential Clinical Instruction Program for staff at Great Falls College; and providing a Biotechnician Assistant Credentialing Exam at Flathead Valley Community College.

iv) Technical Assistance virtual meetings are held via Zoom once a month with all Perkins Local recipients. These calls are held to trouble-shoot issues, share best practices, and provide updates from the Commissioner's Office. In addition to monthly meetings, OCHE provides 1-2 day intensive trainings that provide Perkins campus coordinators more in-depth professional development through guest speakers from industry associations and/or colleagues from other state agencies.

### **Secondary Response:**

#### **i) Agriculture Education**

The Agricultural Education Specialist collaborated with Montana State University, Montana Association of Agricultural Educators (MAAE), Ag Technology Presenters, to provide curriculum support and technical skill updates to the teachers. Teachers attending Summer Update received a continuous curriculum on building a Safety Culture presented by Dr. Dustin Perry. They also received training from a Montana ag teacher who is utilizing drones in his classroom for their drones they received the previous year. Teachers also learned about how to Artificially Inseminate cattle with hands on demonstrations and practical applications. During the conference teachers were able to judge four head of livestock, butcher the livestock, grade the meat from the animals and then finish processing meeting the industry standards.

#### **Business Education**

Through a number of public and private partnerships with state and national partners, information and resources are

shared to expose both teachers and students to high-skill, high-wage, and in-demand occupations. In coordination with the American Institute of Certified Public Accountants (AICPA), their interactive website Start Here, Go Places. and the Montana Society of Certified Public Accountants, students and educators are informed about the range and breadth of accounting. Educators are able to utilize curriculum materials on the Start Here, Go Places website. The Montana Society and their Young Professionals group has also been reaching out to teachers to share career opportunities, including those within rural communities, though both in-person and virtual presentations.

In partnership with Montana State University, Montana Technological University, and University of Montana, over 100 hours of computer science professional development events were supported for Mobile CSP, Joy and Beauty of Computing, and Game Programming in June 2021. Based on the College Board's emerging Advanced Placement (AP) Computer Science Principles curriculum framework for introductory computer science, in the Mobile CSP participants learned programming and computer science principles by building socially useful mobile apps using MIT's App Inventor. The Joy and Beauty of Computing course provided an overview of the world of computing, as well as a gentle introduction to computational thinking using the Python programming language. It also examined the computing field and how it impacts the human condition and introduced exciting ideas and influential people. Participants in the Game Programming course developed skills using Unity to prepare students for the jobs of tomorrow in the field of interactive design and development by creating interactive products and experiences in 2D, 3D, AR and VR.

In partnership with the Montana Council on Economic Education and the First Interstate BancSystem Foundation, teachers were able to provide students with a hands-on, in-class business simulation where students make all the operating decisions for their business to produce, sell and distribute widgets through the Big Sky Biz Sim by First Interstate Bank. The decision inputs are then matched against other teams competing across Montana for the highest stock market price at the end of eight quarters, or weeks in the simulation.

In another partnership between the Montana Council on Economic Education and Glacier Bancorp, Montana Business and Marketing Education teachers have the opportunity to enhance economic and financial literacy instruction through participation in The Stock Market Game. In this nine-week simulation, students are provided hypothetical funds to invest in the stock market. Students must have at least five separate stocks and/or mutual funds at the end of the simulation, so research and diversification are crucial for success.

During FY2022, the Montana Chamber of Commerce Foundation and Empowered worked in partnership to provide curriculum resources, professional development, and technical assistance for Montana Business Educators in the teaching of entrepreneurship.

### Family & Consumer Sciences Education

Through partnerships with state and national partners, information and resources are shared to expose both teachers and students to high-skill, high-wage, and in-demand occupations. In coordination with the Montana Restaurant Association, the ProStart Program is sponsored and offered in Montana in Family & Consumer Sciences programs. With Hospitality & Tourism being our second largest industry, this curriculum exposes students to numerous options as well as working with local restaurants to be exposed to highly skilled industry professionals. Both teachers and students are supported in this realm both in-person and virtually to ensure quality secondary programming. There were 16 ProStart programs during this fiscal year, and included two industry immersions for teachers and students, approximately 20 attended. In addition, a three day culinary immersion was sponsored by the Montana Culinary Institute and Flathead Community College. Twenty three attended this event which focused on all aspects of the industry, but culinary cooking techniques were a strength.

In partnership with Montana State University's Department of Health & Human Development, Family & Consumer Sciences professionals were trained in a summer institute centered around the Critical Science Perspectives within Human Services Career Pathways with both in-person and virtual attendance options. Approximately 30 hours of training was provided by MSU faculty and industry speakers on the topics of cultural considerations for native foods, food and nutrition education in culinary programs, financial literacy and hospitality and tourism entrepreneurship. The OPI FCS specialist Gaya Randel lead a discussion on the FCS body of knowledge integration into FCS programs through a national leaders panel, as well as teaching employability and 21st century skills through CTSO integration into the FCS classroom. A total of 40 teachers took part in this event.

During FY2021, FCS professional organizations provided content and industry aligned programming in the areas of food sourcing and value-added production, apparel entrepreneurship, changes in the restaurant industry, 21st century skill education and other related topics to provide curriculum resources, content and technical skill training and building network across Montana. Approximately 30 attended each the MACTE--October 2021 and MAFCS--April 2022 conferences.

### Industrial Technology Education

March 2022 SkillsUSA Montana coordinated and supported State Leadership and Skills Conference was held in Helena at the Helena College. Specialist offered judging and coordination support as well as distribution of information. Nontraditional student participation was successfully encouraged.

In July 2022, the Montana SkillsUSA students, chaperones, advisors, and state staff traveled to Atlanta, Georgia for the National SkillsUSA competitions. They competed in Architectural Drafting, Automotive Refinishing Technology, Automotive Service Technology, Cabinet making, Carpentry, Chapter Business Procedures, Chapter Display, CNC Milling, Diesel Equipment Technology, Extemporaneous speaking, Job Interview, Opening and Closing Ceremonies, Photography, Pin Design, Power Equipment Technology, Prepared Speech, Welding and Job Skill Demonstration.

Industrial Technology Specialist, Michael Houghton, participated and offered support Montana teachers by Presentation of CTE Content Standards, Perkins Applications, School Safety, participation in and support for workshops was provided.

In the fall of 2021 CTAE Director Shannon Boswell participated in the CTE Gap Analysis train the trainer workshops along with Montana CTE State Director Jacque Treaster and staff from OCHE. From the trainings the group worked together to partner secondary programs with post-secondary schools to look at the GAP Analysis tool and support the work of identifying special populations and supports to increase their access to CTE as well as success in programs. There were three post-secondary partners and two to three secondary programs from their region of the state. We identified some smaller Class C schools to partner with larger Class A schools, as well as ensuring we had representation from several of our reservation schools to look at their data. The training was well received and lead to great discussion on recruitment and ways to work collaboratively.

iii) The New CTE Professionals Workshop Hybrid Workshop 2021 was conducted via hybrid model for 2021 and held over two virtual sessions and one in-person session. The virtual sessions were held September 21 and October 12, 2021, with the in-person session on October 20, 2021, in Bozeman, Montana, at the GranTree Inn. This free, professional development opportunity was designed specifically for CTE teachers in their first five years in the Montana CTE classroom. Topics of the training included Perkins funding, State CTE funding, CTE advisory boards, professional development organizations, instructional strategies for the CTE classroom, relationship building with school and community, safety and liability in the CTE classroom, work-based learning, CTE and program-area standards and guidelines, and Career and Technical Student Organizations (CTSOs). A total of 38 CTE teachers, seven OPI CTE Staff, and six CTSO State Directors attended.

During the summer of 2021 eight teachers were also able to work with business and industry partners in a Teacher Externship program. The program was grant funded and coordinated by the Montana Work-based Learning Collaborative. The WBL Collaborative secured partners to offer a weeklong externship that would allow teachers to see all aspects of their business. These were Manufacturing externships that provided a glimpse into the business and marketing of products, safety and production, shipping, human resources and even provided the teachers with some swag and resources for their classrooms and students. The success of this first year has provided more interested in the future year's extern opportunities.

### Agriculture Education

The Early Career Professionals Workshop was held virtually and in person in starting in September in which we meet with teachers who were under five years of teaching. The in-person workshop was held in Bozeman at the Gran Tree in collaboration with the Agricultural Education Department, National FFA Staff, and the Montana FFA Advisor. During this workshop teachers had a more direct one on one opportunity to ask questions, receive training on deadlines, reporting systems, and curriculum development. Presenters provided many digital and hard copy resources that would be useful for new teachers. They were helped with CTSO management and membership questions.

Our teachers had their own Professional Development track during the Fall Montana Association of Career and Technical Educators (MACTE) Conference. In this track they received direct instruction on the new Montana Career Pathways, how those pathways were developed, and information on how they tied to our post-secondary programs. They also were given information on free online instructional resources provided by the National FFA Organization.

During the year, the Agricultural Education Specialist, was a guest presenter at Montana State University (MSU) for our pre-service teachers. Speaking in several classes about Montana Career Pathways, SEID course codes, Perkins and State Vo-ed funding, and expectations of teachers and programs. This is an opportunity to help better prepare our future teachers in the requirements that they will have as an CTE teacher.

There was teacher led workshops in drones, artificial insemination, livestock judging, meats judging, meat cutting, DEI

training, tractor safety.

The Montana Association of Agricultural Educators with the Office of Public instruction implemented a new mentoring program which is called the SET program (Success for Early Career Teachers). We had a six-hour meeting before the summer update program with all teachers along with three Zooms. This program asks the new teachers to select 3 mentor teachers and gives them the opportunity to interact with them many times throughout the year. Another resource the MAAE/OPI gave every teacher to help with organization was an Ag Teacher Calendar to help with dates for events for teachers, teacher checklists, and student organization.

### Business Education

During the Business Professionals of America, Montana Association 2021 Fall Leadership Conference (October 3-4, 2021), Business Education Specialist Eric Swenson provided technical assistance and resources for new and veteran local chapter advisors regarding updates and additions to the Framework for Business Education in Montana, the Montana K-12 Course Codes and Descriptions Reference Manual for Business and Marketing Education; details on the addition of the Arts, Av/V Technology, & Communication Montana Career Pathway; information on the draft of the new Montana Standards for Career and Technical Education and the new Computer Science standards; an update on State CTE/VoEd Funding; and provided an overview of the new guidance and requirements of Perkin V. Details regarding CTE and business education professional development opportunities for the 2021-2022 school year were also provided.

On October 22, 2021, Business Education Specialist Eric Swenson presented information to Montana's business educators in attendance at the Montana Association of Career & Technical Education Fall Institute 2021. Presented as part of the Institute's programming for the Montana Business Education Association, information provided included updates and information for the Montana Business Education Curriculum Resources Binder information regarding Montana CTE Funding & Career Pathways, CTE Standards update, and State CTE/VoEd and Perkins funding updates.

During the Fall 2021 semester, Business Education Specialist Eric Swenson provided training and instructional support to the students of the business education teacher preparation program at the University of Montana Western in Dillon. Some the topics covered included principles and philosophies of career and technical education, business education curriculum development and resources, developing Montana Career Pathways, using the web-based career guidance system Montana Career Information System (MCIS), advising a Business Professionals of America or DECA chapter, and the importance of membership and active participation in professional organizations.

### Family & Consumer Sciences Education

During the 2021-2022 school year, Family & Consumer Sciences Education Specialist technical assistance and resources for new and veteran FCS educators via virtual gatherings in August and then monthly to ensure connectivity and support. In October 2021 and April 2022, sessions were lead where teachers were asked to review their professional and classroom needs and requests for support items to be developed by the OPI Specialist. A total of 45 teachers were part of these discussions.

During Fall 2021 into Spring 2022, the Family and Consumer Sciences Specialist, Family, Career and Community Leaders of America State director and Montana State University FCS Teacher Educator meet routinely to discuss streamlining support for the field and ensure programming aligned across all three entities. Future plans were made to expand this support with implementation beginning in the Fall of 2022.

Partnerships with national organizations is bringing high quality materials and initiatives to build support for retainment and recruitment of FCS educators. These range from classroom lesson plans and posters to nationally produced videos and format for local FCS promotional activities.

Transitioning teachers as well as new professionals, persons interested in moving into the Montana FCS classrooms and/or administrators are supported through one-on-one correspondence and contact by Gayla Randel, OPI FCS Specialist to assist with issues of concerns that are impacting their FCS programming. Approximately eight to ten are supported monthly.

In multiple instances, the importance of membership and active participation in professional FSC/CTE organizations is encouraged for all.

### Health Science

Missoula College, in partnership with UM Online, offered a dual-credit Anatomy and Physiology training course for health science teachers. The purpose of this course is to educate high school science and physical education/health enhancement teachers about the requirements for dual-credit Anatomy and Physiology courses and introduce new health science teachers to the minimum components of a career and technical education health science program. In addition, Montana HOSA – Future Health Professionals offered a sequence of online, facilitated trainings to support teachers in starting HOSA chapters, develop a learning community of local teachers, develop understanding of CTE Basics, development of a program of work and competitive event understanding. Flathead Valley Community College facilitated a Biotechnician Assistant Certification Exam workshop for health science teachers interested in preparing students for the B.A.C.E. industry-recognized credential. This workshop provides educators hands-on experiences with the skills, techniques, and knowledge within biotechnology, biomedical, and bioinformatics curricula in the context of working in the bio-industry. The Health Science Specialist provided mentorship and guidance for teachers interested in adding a CTE Health Science endorsement and provided technical support for teachers going through the licensure process. The Health Science Specialist assisted schools through the Carl D. Perkins grant application process. The Health Science Specialist provided judgement activities during the 2022 HOSA State Leadership Conference. Competitive events at the HOSA SLC are a culminating event designed to showcase and recognize the competencies developed by members through Health Science and Biomedical Science class instruction, related job training, and HOSA-related activities. The Health Science Specialist participated in the yearly business and board meetings facilitated at the HOSA State Leadership Conference.

### Industrial Technology Education

Industrial Technology Education Specialist coordinated with post-secondary teacher preparation programs at Montana State University-Northern to offer advanced training to alternatively endorsed teachers, leading to a broad field teaching endorsement.

Program and training opportunities were delivered to teachers and administrators through emails, phone calls and face-to-face discussions.

Professional Development opportunities, such as TSA Summer Update in Ronan Montana. Participants were presented an overview of Montana Career and Technical Education Content Standards, built classroom-ready projects to instruct students in STEM disciplines and visited Montana Twist drill bit factory to learn more about the manufacturing industry and to create greater relevance in classroom instruction.

Industrial Technology Specialist met with Department heads from both Montana Universities offering Teacher Preparation. Promotion of Teacher prep programs and the needs of said programs were discussed, as well as optional entry into the same. Specialist worked with both programs to distribute information and recruiting literature to schools, teachers and prospective students.

### **C. Describe your process and priorities in making funds available for the recruitment of special populations to enroll in career and technical education programs. Indicate the major accomplishments as a result of using these funds. (Section 112(a)(2)(A) of Perkins V)**

Because Montana has a smaller allocation, based on the formula, our state only has \$628 dedicated specifically for recruitment of special populations to enroll in CTE programs. This number is very low so there are no major accomplishments to report using these funds, but because Montana prioritizes work with special populations, there are other accomplishments to report beyond the use of these funds.

OCHE staff works closely with the MT Governors Office, the Department of Labor and Industry, and the Office of Public Instruction to tackle barriers that CTE students are facing. Much of our work is dedicated to reducing barriers that students with disabilities, students that are economically disadvantaged, students who are single parents, and students who are experiencing homelessness. Many times, barriers are reduced through targeting advising and recruitment, targeted student success services such as tutoring, and reducing or eliminating costs for access to postsecondary education.

Montana offers free applications for Montana residents to apply to any MUS postsecondary institution. Our two-year campuses also offer targeted advising and student services for CTE students that are part of special populations. Childcare for single parents has also been a topic that Montana state agencies is working to solve.

### **Secondary Response:**

#### Agriculture Education

During the year Agricultural Specialist is available to program teachers through a variety of ways, one is a Google group,

where teachers can pose curriculum and program questions. This is open to all teachers for response, but it also allows the specialist to monitor and assist in programs and areas as teachers need. There are also a series of meetings during the year; eight regional trainings where they can ask direct questions and updates are provided, there is a state-wide winter and spring meetings where the specialist can discuss reminders and upcoming dates and deadlines

### Business Education

During FY2022, professional development and technical assistance was provided by Business Education Specialist Eric Swenson to secondary and post-secondary business educators, school administrators, and school counselors regarding the Montana Business Education Curriculum Resources binder. The compiled resources include the updated Framework for Business Education in Montana, the Montana K-12 [SCED] Course Codes and Descriptions, the National Standards for Business Education, the Common Career Technical Core from Advance CTE, and the updated Business and Marketing Education Program Guidelines. The Framework for Business Education in Montana is aligned to the National Standards for Business Education and the Common Career Technical Core and includes curriculum information from district, county, and curriculum cooperatives around the state. The Framework for Business Education in Montana includes an alignment and crosswalk to the National Standards for Business Education. The Framework also includes crosswalks to the competitive event programs for Business Professionals of America and DECA—which further enhances and demonstrates the intracurricular relationship of business and marketing education programs to Career & Technical Student Organizations

### Family & Consumer Sciences Education

During FY2022, professional development and technical assistance was provided by the Family & Consumer Sciences Education Specialist to secondary and post-secondary Family & Consumer Sciences educators, school administrators, and school counselors as needed via email communication, phone calls and online meetings. Technical Assistance is also provided through an informative e-newsletter. This communication is sent out to Family & Consumer Sciences Education teachers in Montana during the school year and contains information about professional development opportunities, curriculum and funding resources, scholarships for students and teachers, and various due dates and deadlines related to CTE, FCCLA, and Perkins applications and data collections. This communication was produced by the MSU teacher educator, MT FCCLA state director and MT OPI FCS specialist to streamline communication and support each other. Distribution lists are updated annually and total approximately 80 recipients.

### Industrial Technology Education

Throughout 2022 Industrial Technology Specialist, Michael Houghton provided technical and curricular assistance to schools across the State of Montana via phone, virtual meetings and face-to-face contacts. Support included extensive assistance with CTSO development and recruitment, new program-of-study development, Carl D. Perkins grant assistance and teacher licensure.

## **D. Report on the effectiveness of the use of State leadership funds in—**

- i. Achieving the goals described in section 122(d)(2) of Perkins V and the State-determined levels of performance described in section 113(b)(2)(3)(A) of Perkins V.**
- ii. Reducing disparities or performance gaps as described in section 113(b)(2)(3)(C)(ii)(II) of Perkins V.**

### **(Section 124(a)(2) of Perkins V)**

#### **State and Postsecondary Response:**

Professional Development was provided to postsecondary Perkins Local coordinators related to the State-determined levels of performance to ensure each campus was aware of the goals, how the campus has historically met or not met the goals, and best practices/innovative ideas to implement in order to achieve the goals. OCHE provides detailed report cards for each campus so they may observe and research performance gaps. Data is provided to show gaps in performance for students in special populations, ethnic groups, gender, and career cluster. Campuses are required to prioritize addressing opportunity gaps with the use of their local funds, so we use State leadership funds to assist them in making those funding decisions.

#### **Secondary Response:**

Secondary leadership dollars were used to support teachers through professional development of new professionals to promote work based learning and post-secondary credits. Other professional development was provided to career and technical education teachers, school administrators and counselors through industry panels, technical assistance calls and visits and content standard revisions. In the summer and fall of 2021 our staff implemented Virtual Office Hours for all

things CTE related. This allowed teachers, administrators, counselors, and clerks the opportunity to hop online and ask a variety of questions, provided an easy way to trouble shoot, share screens and work through Perkins performance.

When evaluation postsecondary credit and work-based learning, there are deficiencies across the board in all populations, some are due to slow rebuilding from Covid, and others are due to a shortage of teachers and staffing turn overs. To assist with the improving work-based learning for all students, the CTE unit has been part of an ongoing Montana Work-based Learning Collaborative. This collaborative has drawn in partners to represent state agencies, education partners, business and industry partners and non-profit groups. The collaborative is working to provide equitable opportunities across the state of Montana who's geographical and smaller population density make the challenge unique.

Along with this partnership our CTE Specialists also work with math, science and English content specialists to support their CTE teachers in improving performance in those areas. This past year CTE Specialist invited our core content specialists to travel out to schools and provide input to the CTE Programs. STEM was one area that Industrial Technology Specialist Mike Houghton was able to expand and invite the Science Specialist Michelle McCartney to a few school visits that has led to some middle school and high school STEM and Science collaboration.



# Consolidated Annual Report, Program Year 2021 - 2022 Montana

## 2b: Narrative Performance: Fiscal Responsibility

---

- A. For each entity that received a formula allocation under section 131 (secondary education programs), please provide the name of the entity, the National Center for Education Statistics (NCES) identification number, and the amount allocated. Public School NCES ID numbers can be found at:

<https://nces.ed.gov/ccd/schoolsearch/>.

See attached file for response.

- B. For each entity that received a formula allocation under section 132 (postsecondary education programs), please provide the name of the entity, the NCES identification number if the entity is a public school district or the Integrated Postsecondary Education Data System (IPEDS) identification number if the entity is an institution of higher education, and the amount allocated. School District NCES ID numbers can be found at: <https://nces.ed.gov/ccd/districtsearch/>. Public and Private Colleges and University IPEDS numbers can be found at: <https://nces.ed.gov/collegenavigator/>.

See attached file for response.

- C. Describe your process and priorities in using the reserve for local recipients, if applicable. Indicate the major accomplishments of your local recipients as a result of using these funds. (Section 112(a)(1) and (3) of Perkins V)

### State/Postsecondary Response:

\$538,727 in Rural Reserve grants was awarded to postsecondary campuses. Priority Areas for the 2021-2022 grant year were to **advance CTE exploration and instruction through technology** and **develop and strengthen CTE partnerships in Montana** by:

1. Expanding opportunities for students to participate in distance and blended-learning CTE programs.
2. Using technology to enhance career exploration activities.
3. Increasing access to high-quality CTE programs including (but not limited to) those that offer: dual enrollment, work-based learning, and/or industry recognized credentials. *Ideal projects will align with regional workforce demand and the programs offered at the applicant institution.*
4. Increasing the number of opportunities for Montana high school students to explore and engage in college and careers through dual enrollment with priority given to growing CTE-focused dual enrollment programs.
5. Expand public knowledge of Career & Technical Education and/or Montana Career Pathways program through outreach and career exploration events and activities.
6. Introducing new or building capacity for existing industry recognized credentials, with priority given to those available to both secondary (through dual enrollment) and post-secondary participants.
7. Pilot new or innovative CTE programs that include a secondary or middle school partnership, especially those that include work-based learning opportunities.

Applicants must address at least one of the priority areas listed above to be considered for funding and all grant proposals must include:

1. Demonstration of an innovative use of technology to advance CTE exploration or instruction.
2. New or expanded partnerships with secondary or middle school LEA(s).
3. If requesting funds for dual enrollment activities, applicants must demonstrate a focus on new or expanded opportunities in CTE-specific programs or courses.

Major accomplishments through these grants include: hosting a Career Fair for high school students with University of Montana Western and the Dillon Chamber of Commerce; expansion of CTE dual enrollment in biotech, welding and building trades through FVCC; expansion of CTE dual enrollment in technical drafting, computing, accounting, and food

safety through Gallatin College; an Industrial Expo and Dual Enrollment summit hosted by Missoula College; PROSPECTS Career Exploration events hosted by Helena College featuring healthcare professions and manufacturing; LIFE career exploration event and Girls in STEM event hosted by Great Falls College; Trades and Technology Day hosted by Highlands College; and Automotive and Welding Expos hosted by City College.

**Secondary Response:**

This year the OPI was able to utilize the Perkins Rural Reserve Grant to support CTE in the middle grades. Schools had to show a connection to their secondary programs Montana Career Pathways. There were 24 applications and 20 were funded at least at a partial level. Using some additional funding streams of Advancing Agricultural Education and Perkins State Leadership allowed us to support more proposals.

Due to the overwhelming response the OPI has been granted fiscal year 2023 Rural Reserve Funding again and plans on supporting CTE in the middle grades for the 2022-2023 school year.

# Consolidated Annual Report, Program Year 2021 - 2022 Montana

## **2c: Disparities or Gaps in Performance**

---

*Review your State's performance data in section IV.B.3 of this report. Identify and quantify any disparities or gaps in performance on the State determined levels of performance between any disaggregated category of students and all CTE concentrators served by the eligible agency under the Act.*

I have reviewed the quantifiable descriptions of disparities or gaps in performance on the State determined levels of performance between any disaggregated category of students and all CTE concentrators, as shown in section B.3 of this report.

### **Additional Information**

The Montana Office of Public Instruction has reviewed the Secondary disparities or gaps in performance on the State determined levels of performance between any disaggregated category of students and all CTE concentrators, as shown in Secondary portion of section 4 of this report.

# Consolidated Annual Report, Program Year 2021 - 2022 Montana

## 2d: Implementation of State Program Improvement Plans

---

Review your State's performance data in section 4 of this report. If your State failed to meet at least 90 percent of a State-determined level of performance for any of the core indicators under section 113(b)(2)(2) of Perkins V for all CTE concentrators, provide a State program improvement plan. The plan should address, at a minimum, the following items:

- i. The core indicator(s) that your State failed to meet at the 90 percent threshold.
- ii. The disaggregated categories of students for which there were quantifiable disparities or gaps in performance compared to all students or any other category of students.
- iii. The action steps which will be implemented, beginning in the current program year, to improve the State's performance on the core indicator(s) and for the categories of students for which disparities or gaps in performance were identified.
- iv. The staff member(s) in the State who are responsible for each action step.
- v. The timeline for completing each action step. (Section 123(a)(1) of Perkins V)

**NOTE: First complete the performance indicator tables in Section IV below. Then return to complete this question.**

---

**Indicator:** 2S1: Academic Proficiency in Reading Language Arts

**Disaggregated Categories:** Male; Female; American Indian or Alaskan Native; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White; Two or More Races; Individuals with Disabilities; Individuals from Economically Disadvantaged Families; Individuals Preparing for Non-traditional Fields; Single Parents; English Learners; Homeless Individuals; Youth with Parent in Active Military; Agriculture, Food & Natural Resources; Architecture & Construction; Arts, A/V Technology & Communications; Education & Training; Finance; Hospitality & Tourism; Human Services; Information Technology; Manufacturing; Marketing; Transportation, Distribution & Logistics

**Action Steps:**

The reading performance indicator shows disparities for both male and female students, although the female students were just under the 90% threshold. All racial and ethnic subgroups except Asian and all special populations were unable to meet the 90 percent threshold. While some of these subgroups reflect smaller reported populations- it does show the overwhelming need to address reading skills. There was some anticipation in lower scores as testing resumed coming out of Covid testing waivers.

Working within our agency to share data on performance indicators and help with identifying schools to be identified as either comprehensive, targeted, or universal support. The CTE Specialist work to promote cross-curricular standards and lessons, encouraging reading, math, and science in all CTE content areas. They work with the reading, math, and science instructional coordinators to promote professional learning opportunities with in CTE and academic areas.

Schools identified for comprehensive support are working in partnership with the schools, district, and the OPI to conduct a comprehensive needs assessment of both operational (i.e., school board efficiency, school climate, and student engagement) and instructional components (i.e., leadership, professional development, and curriculum and standards).

All schools identified for comprehensive support and improvement are developing and implementing a Continuous School Improvement Plan based on the comprehensive needs assessment.

Specific strategies include:

Providing wraparound services to students and their families (e.g., mental and physical health services, mentoring);

Engaging students in school improvement through youth voice and advocacy work.

Supporting culturally responsive practices, particularly for American Indian communities.

Implementing systemic literacy and math improvements through specialized instructional personnel including a variety of educators, as well as library media and digital literacy and math specialists; and

Use of the Montana Early Warning System to identify students at risk of dropping out of school, apply targeted interventions based on student needs, and track interventions over time to determine if the interventions are working.

**Staff Member(s):**

Agricultural Education Specialist,

Business and Marketing Specialist,

Family and Consumer Science Specialist

Health Science Specialist,

Industrial Technology Specialist,

Director of Career, Technical and Adult Education

Director of School Improvement Unit, Department of School Innovation & Improvement

Department of School Innovation & Improvement

**Timeline:**

Using the process for annual meaningful differentiation, the OPI will monitor the schools identified for comprehensive support. The OPI has identified three criteria for exiting comprehensive support. • The first criteria is to exit out of the lowest performing 5 percent of Title I schools after three years. This is the basic criteria necessary to exit comprehensive support. Title I schools that are no longer in the lowest performing 5 percent and all high schools that have improved graduation rates to be at or above 67 percent will be eligible to exit comprehensive support. Once schools have met the first criteria, they must meet the second or the third criteria to demonstrate continuous improvement and not fall back into the lowest performing five percent. • The second criteria is to meet the academic growth goals (ELA and Math) set in a school's CSIP for at least three years in a row beginning with the first year of being in comprehensive support and improvement. Every district and school are required to submit a continuous improvement plan. The plan will be driven by a comprehensive needs assessment and the school's report card and growth goals that include the same growth percentages each year as the long-term and interim goals set by the state. • The third criteria is to show continual improvement in all of the components within the comprehensive needs assessment. Components include operational components with foundational success indicators such as a functional school board, personnel retention, and financial stability; and instructional components such as academic leadership, school-wide commitment, curriculum and standards, effective instruction, professional development, and evidence-based interventions. The OPI and external partners providing support to schools will score each school each year on a scale from 1 to 5. A score of 1 indicates beginning implementation of each component while a score of 5 representing a fully sustained implementation of the component. Schools will also take and use the comprehensive needs assessment to develop and monitor their academic goals within their CSIP. Improvement means moving from 1 to at least 3 over the course of three years.

**Targeted Completion Date:** 06/30/2024

---

**Indicator:** 2S2: Academic Proficiency in Mathematics

**Disaggregated Categories:** Male; Female; American Indian or Alaskan Native; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White; Two or More Races; Individuals with Disabilities; Individuals from Economically Disadvantaged Families; Individuals Preparing for Non-traditional Fields; Single Parents; English Learners; Homeless Individuals; Agriculture, Food & Natural Resources; Architecture & Construction; Education & Training; Finance; Hospitality & Tourism; Human Services; Manufacturing; Transportation, Distribution & Logistics

**Action Steps:**

The math performance indicator shows disparities for both female and male students with male students' performance just shy of the 90% threshold. All racial and ethnic subgroups except Asian were unable to meet the 90% threshold, although white students were just below the 90%. All special population subgroups: except youth with Parents in Active Military were unable to meet the 90 percent threshold, however the individuals preparing for non-traditional fields were just under 90%. While some of these subgroups reflect smaller reported populations- it does show the overwhelming need to also address math skills.

Working within our agency to share data on performance indicators and help with identifying schools to be identified as either comprehensive, targeted, or universal support. The CTE Specialist work to promote cross-curricular standards and lessons, encouraging reading, math, and science in all CTE content areas. They work with the reading, math, and science instructional coordinators to promote professional learning opportunities with in CTE and academic areas.

Schools identified for comprehensive support are working in partnership with the schools, district, and the OPI to conduct a comprehensive needs assessment of both operational (i.e., school board efficiency, school climate, and student engagement) and instructional components (i.e., leadership, professional development, and curriculum and standards).

All schools identified for comprehensive support and improvement are developing and implementing a Continuous School Improvement Plan based on the comprehensive needs assessment.

Specific strategies include:

Providing wraparound services to students and their families (e.g., mental and physical health services, mentoring);

Engaging students in school improvement through youth voice and advocacy work.

Supporting culturally responsive practices, particularly for American Indian communities.

Implementing systemic literacy and math improvements through specialized instructional personnel including a variety of educators, as well as library media and digital literacy and math specialists; and

Use of the Montana Early Warning System to identify students at risk of dropping out of school, apply targeted interventions based on student needs, and track interventions over time to determine if the interventions are working.

**Staff Member(s):**

Agricultural Education Specialist,

Business and Marketing Specialist,

Family and Consumer Science Specialist

Health Science Specialist,

Industrial Technology Specialist,

Director of Career, Technical and Adult Education

Director of School Improvement Unit, Department of School Innovation & Improvement

Department of School Innovation & Improvement

**Timeline:**

Using the process for annual meaningful differentiation, the OPI will monitor the schools identified for comprehensive support. The OPI has identified three criteria for exiting comprehensive support. • The first criteria is to exit out of the lowest performing 5 percent of Title I schools after three years. This is the basic criteria necessary to exit comprehensive support. Title I schools that are no longer in the lowest performing 5 percent and all high schools that have improved graduation rates to be at or above 67 percent will be eligible to exit comprehensive support. Once schools have met the first criteria, they must meet the second or the third criteria to demonstrate continuous improvement and not fall back into the lowest performing five percent. • The second criteria is to meet the academic growth goals (ELA and Math) set in a school's CSIP for at least three years in a row beginning with the first year of being in comprehensive support and improvement. Every district and school are required to submit a continuous improvement plan. The plan will be driven by a comprehensive needs assessment and the school's report card and growth goals that include the same growth percentages each year as the long-term and interim goals set by the state. • The third criteria is to show continual improvement in all of the components within the comprehensive needs assessment. Components include operational components with foundational success indicators such as a functional school board, personnel retention, and financial stability; and instructional components such as academic leadership, school-wide commitment, curriculum and standards, effective instruction, professional development, and evidence-based interventions. The OPI and external partners providing support to schools will score each school each year on a scale from 1 to 5. A score of 1 indicates beginning implementation of each component while a score of 5 representing a fully sustained implementation of the component. Schools will also take and use the comprehensive needs assessment to develop and monitor their academic goals within their CSIP. Improvement means moving from 1 to at least 3 over the course of three years.

**Targeted Completion Date:** 06/30/2024

---

**Indicator:** 5S2: Program Quality – Attained Postsecondary Credits

**Disaggregated Categories:** Male; Female; American Indian or Alaskan Native; Asian; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White; Two or More Races; Individuals with Disabilities; Individuals from Economically Disadvantaged Families; Individuals Preparing for Non-traditional Fields; Single Parents; English Learners; Homeless Individuals; Youth with Parent in Active Military; Agriculture, Food & Natural Resources; Architecture & Construction; Arts, A/V Technology & Communications; Business Management & Administration; Education & Training; Finance; Health Science; Hospitality & Tourism; Information Technology; Manufacturing; Marketing; Science, Technology, Engineering & Mathematics; Transportation, Distribution & Logistics

**Action Steps:**

The postsecondary performance indicator did not meet the 90% threshold in during the 2021-2022 school year. Schools in Montana were still facing the impacts of Covid, in working to help “catch” students up with learning loss, this at times meant fewer resources for schools to offer and provide dual enrollment. Montana is still offering their one, two free program for high school juniors and seniors to earn up to 6 free credits through dual credit. These steps and implementation of new licensure laws will provide greater flexibilities for our school districts.

While the state performance was low, the gaps in performance are more significant with students from economically disadvantaged families, individuals with disabilities, and homeless students. All ethnicities were well below the 90% threshold.

Working within our agency to share data on performance indicators and help with identifying special populations. The CTE unit works very closely with the homeless and foster care specialist as well as our Indian Education for all and Indian Achievement units. These teams are critical in helping districts know what resources are available to help student achievement. In working closely over the next few years, we hope to see growth in students attaining post-secondary credit.

Montana students are also very fortunate to have many business and industry partners stepping in to create training programs which include dual credit and work-based learning opportunities. Programs like Build Montana works closely with two-year programs to provide mentored training.

The CTE Specialist work to promote dual credit opportunities with the teachers in their field. The OPI also uses their professional learning portal to alert teachers of training opportunities to become dual credit providers. Some of our partners are also offering scholarships for teachers to take courses needed for offering dual credit, as post-secondary programs are opening back up to summer professional learning opportunities there should also be a growth in teachers who are endorsed for dual enrollment.

**Staff Member(s):**

Agricultural Education Specialist,

Business and Marketing Specialist,

Family and Consumer Science Specialist

Health Science Specialist,

Industrial Technology Specialist,

Director of Career, Technical and Adult Education

Director of School Improvement Unit, Department of School Innovation & Improvement

Department of School Innovation & Improvement

**Timeline:**

During the 2021-2022 school year the OPI CTE Specialists concentrated primarily on communicating opportunities for Dual Credit courses to the educators in their fields. In the summer of 2022 post-secondary partners were able to resume offering professional development courses that teachers needed. The OPI also went through negotiated rule making to revise the Administrative Rule for Montana Chapter 57 for Teacher Licensure. These changes were adopted in May of 2022 and provided more flexibilities for alternatively licensed teachers as well as for professors who could offer courses to secondary students. These changes will help recruit more educators and allow more dual credit offerings.

In the 2022-2023 and 2023-2024 school years, the CTE Specialists will continue communicating with educators, post-secondary partners and industry on the dual credit opportunities that are available to high school students. They will also be working to expand post-secondary offerings and certification opportunities. Another change that will be occurring will be the addition of a

half credit of financial literacy for students in graduating cohort of 2026 and 2027 potentially opening up the need for more dual credit offerings. This along with continued legislative support for funding of One, Two, Free and Advanced Opportunities should put Montana back on track to meet the post-secondary attainment goal by the end of school year 2023-2024.

**Targeted Completion Date:** 06/30/2024

---

**Indicator:** 5S3: Program Quality – Participated in Work-Based Learning

**Disaggregated Categories:** Male; Female; American Indian or Alaskan Native; Asian; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White; Two or More Races; Individuals with Disabilities; Individuals from Economically Disadvantaged Families; Single Parents; English Learners; Homeless Individuals; Youth with Parent in Active Military; Agriculture, Food & Natural Resources; Architecture & Construction; Arts, A/V Technology & Communications; Business Management & Administration; Education & Training; Finance; Health Science; Hospitality & Tourism; Information Technology; Manufacturing; Marketing; Science, Technology, Engineering & Mathematics

**Action Steps:**

The work -based learning performance indicator did not meet the 90% threshold in during the 2021-2022 school year. While we see some improvement across the board Montana is still performing below standard. Our gaps in performance are more significant with students from economically disadvantaged families, homeless individuals, youth with active military parents as well as our American Indian or Alaskan Native and two or more race populations.

Working within our agency to share data on performance indicators and help with identifying special populations. The CTE unit works very closely with the homeless and foster care specialist as well as our Indian Education for all and Indian Achievement units. These teams are critical in helping districts know what resources are available to help student achievement. In working closely over the next few years, we hope to see growth in students attaining work-based learning credit. Over the 2021-2022 school year CTE Specialists provided technical calls to assist schools in exploring and setting up work-based learning opportunities. The OPI work-based learning manual was shared out to all school in efforts to assist. Continued work with the Montana Work-based learning collaborative to share information and opportunities across all Montana partners; Reach Higher, Department of Labor and Industry, the Office of the Commissioner of Higher Education, the Montana Chamber of Commerce, Workforce development boards, Allied Health, Montana High Tech Alliance and many other workforce groups. This has been a targeted focus across all sectors to improve work-based learning for all students.

In the spring of 2022 CTE specialist worked with the MT WBL Collaborative to pilot a teacher externship opportunity to connect teachers with manufacturing industry. This would provide teachers with industry contacts, a view of all of the parts of a business and allow them to take that experience back to their students to ensure they are providing the skills needed for success. There were several teachers who participated and gained valuable insight to how they can provide work-based learning opportunities even in more rural parts of Montana. This program will be continued as we work to improve the availability of work-based learning as well as the recorded credit. Anecdotally we know more work-based learning is happening in programs across the state than what is being recorded and reported. The CTE specialist and staff have set goals to improve school district understanding by attending meetings and conferences for school counselors, administrators, superintendents, school board associations and other public events to spread the word. By working with these educational staff and business and industry partners, we hope to see growth in the next few years in work-based learning.

**Staff Member(s):**

Agricultural Education Specialist,

Business and Marketing Specialist,

Family and Consumer Science Specialist

Health Science Specialist,

Industrial Technology Specialist,

Director of Career, Technical and Adult Education

Director of School Improvement Unit, Department of School Innovation & Improvement

Department of School Innovation & Improvement



**Timeline:**

Over the 2021-2022 School year the CTE Specialist will work with local districts to outline WBL expectations, course codes, and professional learning opportunities. Through the summer of 2022 there will be several professional development opportunities offered from the OPI, Post-secondary and business and industry partners. Along with these opportunities the Teacher Externship program will be piloted.

During the 2022- 2023 school year the plans will be to revise and expand the work based learning manual, continue working with the Montana WBL Collaborative in providing more professional development for educators and industry. They will work with industry to expand WBL opportunities available to students and resources for all entities. This work will continue to expand across the state with all partners into the 2023-2024 school year, as more legislation is passed to support schools and industry in the partnership efforts, there will be continued growth and we expect to be at target for the 2024-2025 school year.

**Targeted Completion Date:** 06/30/2025

---