

# Career and Technical Education Standards Economic Impact Report

DRAFT SUMMARY

DRAFT

DRAFT

# Table of Contents

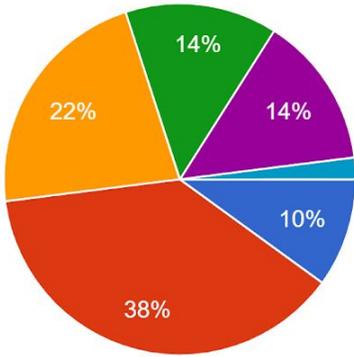
<b>CTE Economic Impact Survey</b>	<b>3</b>
Survey Demographics (n=50*)	3
Content Standards Implementation	3
Instructional Materials	4
Personnel	5
Professional Learning	6
Course Codes	<b>9</b>

\*Note: This is a summary of the Economic Impact Survey. Not all questions or written responses are included.

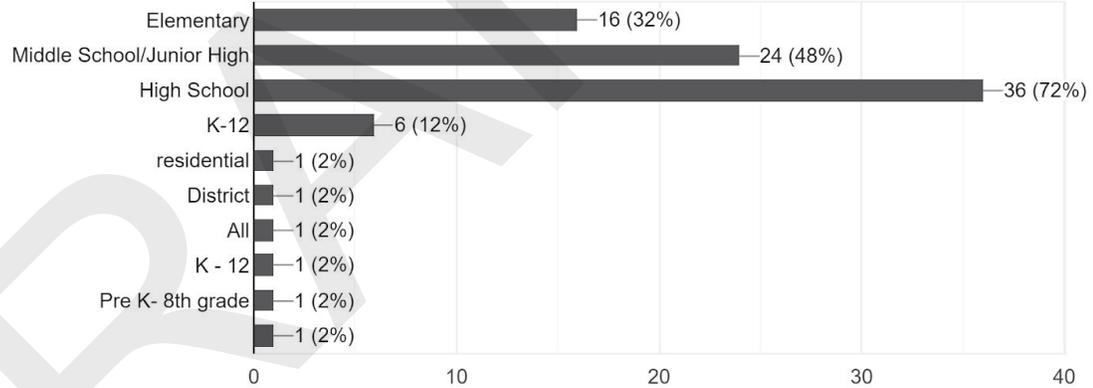
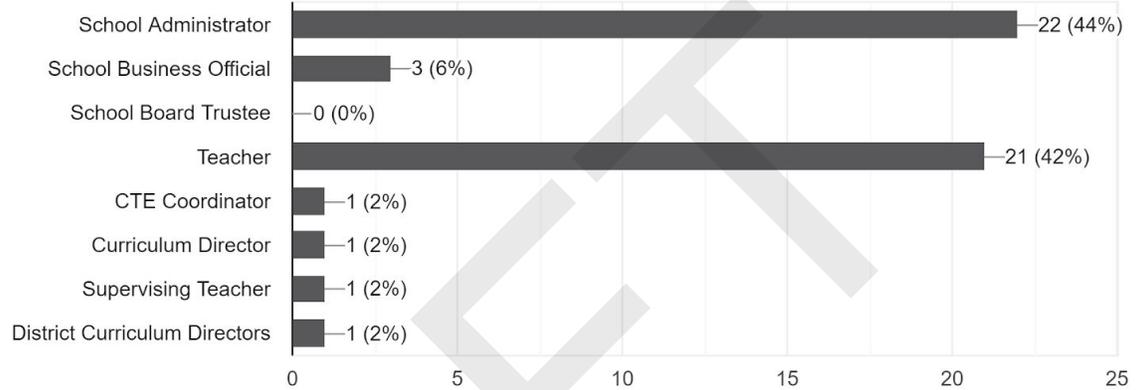
# CTE Economic Impact Survey

## Survey Demographics (n=50\*)

\*many of the questions were optional



- Small School (fewer than 126 students)
- Class C
- Class B
- Class A
- Class AA
- Represent 23 districts (approximately 12,200 students)



## Content Standards Implementation

Question	Yes	No
Do you anticipate that your district will be able to meet the proposed standards with existing resources?	34 (68%)	16 (32%)
Will your district be able to implement the proposed program delivery standards for social studies?	30(65.2%)	16 (34.8%)

The most significant challenges to implementation (select 2) were: Instructional Materials (73.9%), Curriculum Development (43.5%), Personnel (43.5%) and then Professional Development (39.1%)

Updated: February 4,2020

## Instructional Materials

Question	Yes	No	Maybe
Would the proposed standards impose a cost for instructional materials beyond that required to implement the current standards?	30 (68.2%)	14 (31.8%)	
Will your district have difficulty finding instructional materials to implement the proposed standards?	10 (22.7%)	14 (31.8%)	20 (45.5%)

### Additional Feedback:

*"We currently use PLTW for grades K-8, but it is expensive for materials and training. The most difficult part is finding time in the day for these activities, then instructional materials and the funding to purchase those materials for those grade levels will be difficult to come up with."*

*"Have been told over and over, "there is no additional money." Our current resources will be outdated too (we haven't completed a curriculum review since 2012)."*

*"Start-up funds for additional programming.  
Start up instructional materials are needed to increase programming options.  
Instructional materials for start-up programs will be difficult to find."*

*"The cost to keep up with technology of industries has grown in the CTE lab. for example. Industries are using brand new computers and CTE labs are getting by with typewriters that they have gotten by with for the last 20+ years. I am not saying we need a large sum of money every year, but it would be nice to be able to purchase new equipment that would then last for 10+ years."*

*"Finding AFNR-aligned materials can be difficult"*

*"CTE Curriculum is very broad and finding valuable instructional material is challenging. Because of the broadness of topics discussed a lot of time is wasted creating materials and assessments.... There really is no national progression of courses and material in CTE like there is in a core subject like math."*

*"There will be costs associated with tech hardware and software as well as materials for the innovations and projects that the new standards will require of students."*

*"We are a very small school (7 students) and while we have an impressive amount of technology available, we do not have the expertise or the funds to continue the rapidly changing technology."*

*"We have not been able to find a business or computer teacher for a long time."*

*"We do a good job with Middle School and High School, but have not done elementary programming with a CTE emphasis. Some of the expectations are met with current programming from other curriculum and programming. If we need to hire another teacher to meet the proposed standards the cost of that and the elementary specific curriculum would be beyond the financial limits of our district."*

*"We use Perkins funds for instructional and curriculum materials"*

Updated: February 4,2020

**What increase in total dollars would be required to cover the cost associated with Instructional Materials? (best estimate)**

Answer Range: \$1,200- \$1,000,000

A few responses:

*"\$100 per grade K-6 and potentially much more than that in a junior high or high school class."*

*"About \$25K for equipment and supplies to start a Business Ed. program."*

*"\$800k to 1 million. We don't have difficulty in finding the materials, we need funding to support the purchase of updated and ongoing consumables for CTE"*

**Personnel**

Question	Yes	No
Would the proposed standards impose a cost for personnel beyond what is required to implement the current standards?	15 (34.9%)	28 (65.1%)
Will your district have a shortage of teachers endorsed to teach?	24 (57.1%)	18 (42.9%)

If you answered "yes" additional feedback:

*"We currently have two CTE teachers. The standards call for career pathways along personal interests. We have 44 students in grades 9-12. This means there could be 44 different pathways based on each of those student's personal interests. This will not happen. Perkins V requires one pathway for a C school, which is doable. We are planning three different pathways for students. Even that does not allow for personal interest pathways. Students have to take what we offer, which we try to provide based on student interest. However, we can't change our CTE every year based on student interests."*

*"There are additional costs to develop workforce experiences for students. Travel/time for teachers to connect with local employers, travel for students, subs for teachers to make those face-to-face meetings, costs for materials/supplies outside grant and classroom funds to support the standards."*

*"We really need a CTE integration specialist who can work with teachers."*

*"We would like to add a Career Counselor who would lead be responsible for the middle school CTE and also work as a lead Career Pathway Counselor for students 7-12."*

*"Our district does not have a business teacher but we use other resources including MTDA and staff."*

*"We are too small to have the availability of an endorsed teacher."*

*"We are losing certified CTE staff due to retirement and have not found replacements for those long time teachers not to mention the possible need for an additional CTE instructor at the elementary level. You are trying to expand the CTE programming when there are currently no Teacher Education programs in Business or Industrial Arts Education in our state. This does not seem like progress or a positive move for CTE."*

*'Several of our CTE staff are eligible for retirement. When they do retire, this will be struggle to replace"*

*"Currently this standard is embedded into projects which are typically associated with other disciplines. Sometimes the stands are highlighted in stand-alone projects. We do not have a career and tech teacher in the primary level.'*

Updated: February 4,2020

How many new hires would be needed? n=26	Count
0	4
Less than 1 full FTE	2
1	13
2	4
4	1

\*Costs ranging from \$17,000 for part time to \$65,000 per new teacher.

## Professional Learning

Question	Yes	No
Would the proposed standards impose a cost for professional learning beyond those expenses already required to implement the current standards?	22 (51.2%)	21 (48.8%)
Will your district have difficulty finding professional development opportunities for social studies educators?	23 (52.3%)	21 (47.7%)

Summary if answered "yes"

*"This could be because my staff don't want to leave the classroom. However, training needs to be more about industry standards than CTE standards, CTE Manager, etc. Staff need to be able to meet with industry leaders to learn where they are going in the future and the impact for the classroom."*

*"much of the training we provide is related to trauma and mental illness. We would need to explore a whole new area to find resources to train the teachers."*

*"While PVCC does a good job of providing one or two CTE PD days, that's not enough for a whole program"*

*"We have to travel outside our district for any career and technical professional development"*

*"We need support with PD focused on deeper learning."*

*"Most PD in the area is for core academic areas. Instructors usually have to travel and miss work time to engage in quality PD for CTE programs."*

*"Besides professional development associated with the CTE programs themselves, skill development and certification training is difficult to find and fund. Finding the training that works for the time frames my teachers are available for training is the hard part."*

*"Targeted professional development for specific areas in Class A sized districts is usually centered around a single teacher and a Career Pathway, so getting 1 teacher trained presents challenges."*

*"Attending professional development activities is expensive. Our district does not provide any financial assistance for PD therefore the expense falls on the teacher."*

Updated: February 4,2020

*"Because Career and Tech Ed is integrated into all of the other core areas, it can be a challenge to find PD that is specific enough for teachers at the secondary levels who are teaching these standards in a course-specific setting."*

*"It will impose an additional expense for the district to send the entire CTE staff to MACTE every fall and a greater emphasis from administration to require all CTE staff to attend professional development training. If we need certified CTE staff at the elementary level that opens up many challenges for professional development and new personnel."*

*"We currently have difficulty in finding many CTE related prof development for our middle and high school teachers beyond having to travel. The K-5 specific standards are new and will require us to find something grade-level appropriate."*

*"many opportunities but few quality opportunities"*

### **What increase in total dollars would be required to cover the cost associated with professional development?**

Answers: Answers ranged from \$500 to \$100,000\*

*\*\$100,000. This includes paying the teacher for their time to attend the training, any certifications associated with the training and CTE field, travel, lodging, etc.*

### **What professional development would be needed?**

*"Hands on opportunities for my CTE teachers with industry folks, tours of plants and work sites to see how these standards apply to the workforce."*

*"Attending national curriculum (FACS) and CTE based conferences."*

*"Career Pathways"*

*"PD specific to each area. There is a need for training and recruitment for student organizations."*

*"Career field training to keep current with industry standards and technology. Certifications in those fields as well."*

*"Training and opportunities for workplace competencies, career exploration and career development."*

*"Transformational Learning and bringing in new business for Apprenticeship or Job Shadowing program"*

*"Collaboration with release time to collaborate with other teachers and curriculums within a career pathway."*

*"PD in specific technologies to teach these standards, including making graphs, charts, budgets, etc. Also, PD in integrating these standards into other areas effectively."*

*"Better links to apprenticeship options, trade school credits, and secondary education dual enrollment."*

*"Specific programming on ways to meet the Elementary expectations and content specific training for current staff to meet expectations in their areas."*

*"Understanding of Content Standards and how to implement them into the classroom."*

*"FFA and FCCLA requires a lot of attendance for chapters. Additionally, having numerous subjects to teach, we try to be diverse about what we learn and the professional development we attend".*

### **How many teachers will need this professional development?**

*Range 1- 1650*

Updated: February 4,2020

## Curriculum Development

Question	Yes	No	Maybe (if option)
Would the proposed standards, if adopted, require your district to substantially revise its current curriculum?	4 (9.1%)	19(43.2%)	21(47.7%)
Would the proposed standards impose a cost for curriculum development beyond what is required to implement the current standards?	18 (42.9%)	24 (57.1%)	

### Summary if answered "yes"

*"All our CTE teachers spend their time with students. We don't have a time built into a schedule to develop CTE resources We need time to integrate into our content, instruction, and assessment"*

*"Staff would have to revise instructional periods to incorporate the standards into what they already do. Much of the early standards focus on exploration and writing or presenting. This could be incorporated into writing activities, but would have to be aligned with reading and writing goals. During the school year, teachers are tied up with instruction and data analysis to alter instruction strategies. This leaves the summer time for teachers to work on initiatives. We have paid teachers to work the summer (versus them working for local businesses) when funds allow. The state would have to support teacher salaries to work on incorporating these standards with already existing standards and instructional plans with funding for summer work."*

*"Implementing a focus of CTE standards k-6 is where the largest portion of my survey thoughts are coming from. Implementing at this level will take significant changes, costs, and most importantly time."*

*"Though many of the proposed standards can be embedded into other disciplines, requisite time to support teachers in finding ways to embed them all will be necessary. Additionally, the addition of certain benchmarks specifically allocated to grade levels will require instructional time, which is very tight. Finally, teachers will need PD time to learn ways to integrate some of the age-specific benchmarks into their other disciplines."*

*"Teachers are singles in their departments. Curriculum development is on the teacher."*

### What new purchases would be needed?

- Virtual or simulated equipment to cut down costs associated with various courses, such as welding. Models and devices to tear apart and rebuild. PD for staff.
- Could be anything from a computer program to a 3d printer or a plasma cam.
- curriculum resources in early grades for a coherent program K-6
- We need to find and acquire curriculum materials that align with Career Pathways.
- Update Computer Application Books and Software, Welding Simulators, Hydroponic Systems, and Animal Science Kits

### What increase in total dollars would be required to cover the cost associated with curriculum development?

Range: \$400- \$100,000

\*That would depend on the interest of the teacher and willingness to learn new areas of application.

## General Feedback

*"It appears there is a shift to add K-6, which I think is good. However, we need to find a balance in what we are asking our teachers to do. We keep adding things to their day, but have limited number of hours in the day to get it all in. In addition, by adding things, other things have to either come off the plate or be served in smaller portions. This means scores will drop.*

Updated: February 4,2020

*There needs to be a trade off and realistic expectations for what we want our students to be proficient in. The students can't do everything, nor can my staff."*

*"The updated standards are greatly needed. However, educators will need access to professional development opportunities for these changes in standards."*

*"To implement a good school to workforce program and getting students out to have some job site experience it would be nice to have a program template and management system that can be run by one point person. That is also another issue, we need funding for all of this additional administrative work."*

*"Perhaps consideration should be given on developing mobile labs that could visit schools, especially small rural schools, to offer hands-on exploration and curriculum to meet these needs....at least for the elementary students. Teachers are already held accountable for reading, science and math, college and career readiness, and other subjects like suicide prevention, health screening, etc that takes away from instructional time for the things they get punished for when not having students who are proficient. To be proficient, you need adequate time to develop and master skills. When instructional time is taken away for all these other things, students will never master those skills. This is especially true of students who don't have the support at home, who have learning disabilities, or who struggle with reading or math."*

*"These things cost money. I think that it can be done, but it cannot be another unfunded mandate to work miracles. The Legislature needs to be on board, and we will need money to implement this and move our state forward."*

*"...Until CTE courses and progressions are standardized and students are learning the same topics at relatively the same time, it doesn't matter what your standards say it will still be a mess."*

*"Success of change will be determined by the support and attitude of which the change is passed down to the teacher required to implement the changes. Without funding and additional time to make these changes at the most basic level I believe the focus and goal of the changes to the CTE standards will be lost."*

*"In our school we have, at most, two licensed teachers therefore we have to be experts in all curriculum, which is unreasonable."*

*"OPI needs to consider a model that would train current elementary teachers with techniques that would include incorporating the proposed CTE content into their everyday teaching activities similar to what was done with the Indian Education for All model. As proposed, these CTE standards are really not achievable in a small school setting with limited personnel, limited space and limited time available."*

*"The state funding formula should be studied to determine how small schools could maintain efforts in the CTE areas."*

*"Overall the addition of the K-5 grade-level delineation is the biggest change. Middle and High School staff are wondering when career area standards will be developed and adopted. The current and these newly revised CTE standards are soft skills and not discipline specific which makes them difficult to implement and assess outside of a relevant work based learning experience like an internship or pre-apprenticeship."*

## **Course Codes**

Montana course codes are a subset of the NCES (National Center for Education Statistics) Standard Codes. Along with the course code, a content description for each course is provided: [Montana K-12 Course Codes and Description](#)