

Career and Technical Education CTE



At McMurray Middle School

Some background information and
what CTE can mean for your education

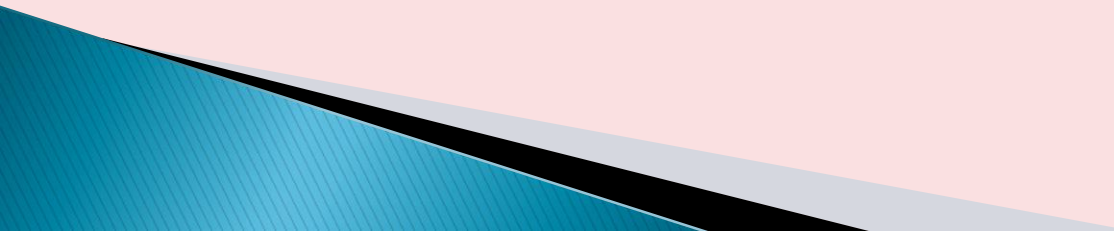
Questions? lheffernan@vashonsd.org

Or, check out my [Teacherweb site](#) under [STEM electives](#)

Career and Technical Education...

Courses that help prepare students for the workplace, college, or for more advanced training by providing opportunities to explore a variety of subjects while gaining academic and technical skills.

CTE Programs...

- ▶ Who – For you!
 - ▶ What – Hands-on experiences to gain skills that are transferrable to the workplace
 - ▶ When – Anytime! (when offered...)
 - ▶ Where – MS, HS, CC/Tech/4-yr, on-the-job, skill centers, apprenticeships
 - ▶ Why – To be career and college ready
 - ▶ How – Take CTE courses whenever you can!
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People & Ideas Behind CTE in the US

- ▶ Booker T. Washington
 - > problem solving AND cognitive skills
- ▶ W.E.B. DuBois
 - > importance of secondary education for all
 - > favored more traditional approach
- ▶ David Snedden, Charles Prosser, John Dewey
 - > all advocates of voc. ed. in public schools
 - > voc. ed. potential to improve public ed.
 - > to prepare for occupations
- ▶ Dennis Mabley
 - > dynamic workforce –voc. ed. part of total ed.

Current STEM (CTE) Courses at McM

- ▶ Design It – Build It with SketchUp, robotics, and Rube Goldberg machines
- ▶ Structures with toothpick and balsa bridges with load/limit testing
- ▶ Intro to Woodworking with hand tools & table-top power tools
- ▶ Vehicles with air, mouse trap, and CO₂ power
- ▶ Architecture with designing and building a model treehouse

- ▶ Plan to add:
 - > Intro to Drafting/CAD
 - > Aero with rubber band airplanes and rockets!

CTE courses at VHS

Currently VHS offers a variety of CTE courses, but not every semester (and more to be added):

- Jewelry Design
- Woodworking
- Engineering Design
- Video Production
- Intro to Video Game Design
- Family and Consumer Science
- Horticulture
- Marketing

Also at each school:
Robotics Club as an
after school/weekend
activity

CTE Helps Everyone

- ▶ Workforce Implications
 - > wider variety of skills
 - > higher level of tech competence
 - > employability
- ▶ Employees need to:
 - > be problem solvers; take initiative
 - > keep up with technical expertise
 - > understand complex systems
 - > be self-directed
 - > collaborate

Future of CTE

- ▶ Must keep in tune with industry needs
 - ▶ 21st Century Skills
 - ▶ Global Network
 - ▶ Technological Explosion
 - ▶ Customer demand of quality and uniqueness and diversity that mass production cannot supply – it is vogue to possess CTE skills!
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