

# Career and Technical Education CTE



At McMurray Middle School

Some background information and  
what CTE can mean for your education

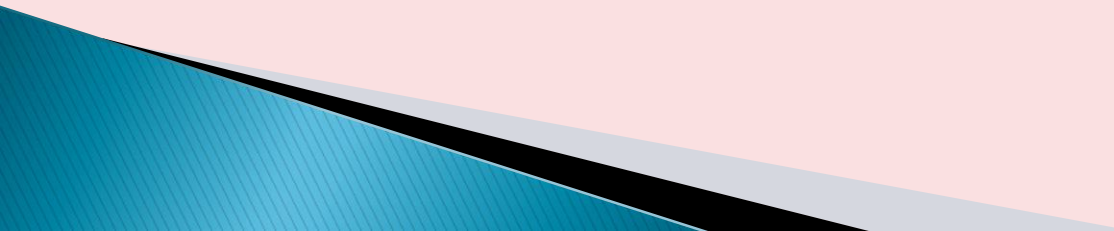
Questions? [lheffernan@vashonsd.org](mailto:lheffernan@vashonsd.org)

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!
- 

# 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 CO<sub>2</sub> 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
  - ▶ 21<sup>st</sup> 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!
- 