

MA in CTE Portfolio
EVT 6948 - Practicum in CTE – Summer 2013
Section II. Core Understanding of CTE
Part 2: Articulation of Core Understandings
Organizational Supports

Understanding of the Domain

What the particular domain means in the context of CTE

During the past few years there has been a greater push forward for CTE programs to be able to measure accountability and outcomes of student's success. The response to the demand has been the states adoption of industry certification testing or IRC (Industry Recognized Credential). CTE is defined as Career and Technical Education. Students are exposed to and education that prepares them for their future. The philosophy of CTE can be described as: "education for work, education about work, and education through work" (Hopkins, 1999). According to Rosenbaum, some people feel that Career and workforce education is not appropriate for secondary leaning environments (Rosenbaum, 2001). However, students in a CTE programs have the opportunity to lean workforce skills. "By teaching students about the certification process and its benefits, students are receiving education about work as well: how job tasks and skills are delineated and assessed and how hiring and promotion are related to obtaining those skills" (Castellano, Stone, Stringfield, 2005). The adoption of effective curriculum, programs following state initiatives and industry certifications can be an effective benchmark tool for district and state program administrators.

The nature of the key elements of the domain

With the passing of the No Child Left Behind Act of 2001, U.S. Congress demanded that all 50 states have a method to measure accountability in public schools. However, in 1994 the *Improving Americas Schools Act* was passed which also implemented accountability measure, thus by the 2001 most schools in the 50 states already were prepared for the passing of the *No Child Left Behind Act*.

In the 1990's the accountability measure programs focused on core classes such as math, reading and science and disregarded the measure of vocational programs. CTE has a direct focus on workforce training, and as states began to find there was a need to measure this accountability of learning. States education programs discovered that industry has already developed a method of measuring skills. As a result many states have adopted industry credentials as an assessment for learning (IRC) (Castellano, Stone, Stringfield, 2005).

The National Skill and Standards board or NSSB was developed in 1994. This board was established to construct a system for assessments and certifications. A skill standard could be defined as the ability to complete a defined task. The NSSB has stated that these types of skills are valuable to individuals and their communities. An individual obtaining theses

credentials will have a recognized skill set valuable to the workforce around the country (Castellano, Stone, Stringfield, 2005).

The Florida Department of Education support to the NSSB was the passing of the Florida Legislature Career and Professional Education Act. The CAPE academy funding sets standards and approves appropriate industry standard exams. A list of the approved certifications can be found on the Florida Department of Education website. Funding is provided to the schools that have students obtain certification to support the programs with equipment and testing costs (<http://www.fldoe.org/workforce/pdf/CAPE-Act-TechAssist.pdf>).

Key Florida Statutes

Section 1003.491, Florida Statutes – Florida Career and Professional Education Act Section 1003.492,

Florida Statutes – Industry-certified career education programs Section 1003.493,

Florida Statutes – Career and professional academies Section 1003.4935,

Florida Statutes -Middle school career and professional academy courses Section 1011.62(1)(o),

Florida Statutes – Funds for the operation of schools, Calculation of additional full-time equivalent membership based on certification of successful completion of industry-certified career and professional academy programs pursuant to s. 1003.492 and identified in the Industry Certified Funding List pursuant to rules adopted by the State Board of Education.

(<http://www.fldoe.org/workforce/pdf/CAPE-Act-TechAssist.pdf>)

How your understanding of the domain translates into actual practice

Two of the four standards that apply to the Carl d. Perkins Act of 1990 and the amendment in 1998 are certification and assessment. This was implemented so that students in the CTE programs are obtaining credentials (Industry Certification) in a state adopted skill. Students will have the opportunity to leave school not only with a diploma, but with a credential or certification (*Carl D. Perkins Vocational and Technical Education Act Amendments of 1998*). According to the Florida Department of Education, industry certifications are *critical* to Florida's workforce. By providing career themed CTE courses that offer certification opportunities, the state of Florida can improve the rigor in their CTE classrooms (<http://www.fldoe.org/workforce/pdf/CAPE-Act-TechAssist.pdf>).

Curriculum- as defined by dictionary.com is a course of study or a programmed plan of activities by a school or college (<http://dictionary.reference.com/browse/curriculum?s=t>).

The goals and objective is for all CTE programs to produce work ready students in alignment with industry standards. Not all areas of CTE have standards for industry certification. There is no core curriculum for CTE as there are many separate fields. The main purpose of the IRC is to demonstrate that a worker has obtained knowledge for an entry level

position (Bartlett , 2004). As it is a goal for many states for all students to obtain a certification, not every industry has a encompassed certification exam(Castellano, M., Stone,Stringfield,2005).

In the state of Florida a list of the approved industry certifications can be found on the Department of Education website: (<http://www.fldoe.org/workforce/programs/IndustryCert/>)

Content Example Engineering Technology

Objective: To provide a K-12 standards based curriculum to develop students who are technologically literate. The themes of the curriculum lessons are designed for awareness in Science, Technology, Engineering and Math through use of the design process. It has many industry supporters and curriculum writers such a NASA. The Engineering by Design curriculum is recommended by ITEEA , has a focus on Technology Literacy Standards(http://www.iteea.org/TAA/Publications/TAA_Publications.html#Standards), and currently has numerous consortium states. Pre and post test are provided to show assessment and student growth. Districts and states utilize this information to determine the effectiveness of their Technology Education programs (<http://www.iteea.org/EbD/ebd.htm>).

Program Example Engineering Technology

Objective: The CSWA exam is a Industry Standard to measure the competency of a SolidWorks user. Upon successful completion of this exam students are considered compliant for the workplace and hold the skills that industry is seeking (http://www.solidworks.com/sw/support/796_ENU_HTML.htm). The CSWA is registered on the CAPE funding list along with numerous other content are certification test (<http://www.fldoe.org/workforce/pdf/CAPE-Act-TechAssist.pdf>).

Evaluation

High skilled jobs often use expensive equipment. The push to develop such skilled students will continue to come at a high dollar cost. Districts will have to oversee the continued updating of education labs to stay current with industry (Castellano, M., Stone,Stringfield,2005).

Aligning programs with state adopted test will ensure that programs are receiving appropriated FTE (Full Time Equivalent) funding (<http://www.fldoe.org/workforce/pdf/CAPE-Act-TechAssist.pdf>). Issues with all programs having availability to a state adopted test are constantly being addressed. Programs must make use of an IRC or state adopted curriculum test to be aligned with Perkins funding and FTE. According to an article written by the Herald Tribune in 2012, Manatee County has received over \$500,000 dollars in FTE funding for student certifications passed (<http://www.heraldtribune.com/article/20120608/ARTICLE/120609634>).

How or what program courses/experiences contributed to the understanding of the domain

Learning from courses such as *Supervision of Local Programs* through the University of South Florida depicts, to be highly effective districts should demand rigor and relevance be withheld in CTE classrooms and have a clear perceptives of core understandings. Students obtaining industry certification upon completion of programs illustrates to the community workforce that schools are producing industry skilled students. The demand of skilled trained graduates can be met by a programs demand of a student mastering relevant industry skills.