

- Increasing the percentage of students who are career ready is extremely important if we are to remain competitive as a nation

## Workforce Outlook

- Between 2010 and 2025, up to 78 million Baby Boomers will leave the U.S. workforce or change work focus
- Only 40 million Gen X'ers and Y'ers will be available to replace them
- 64% of all jobs in Kansas (1 million jobs) will require some postsecondary training beyond high school in 2018

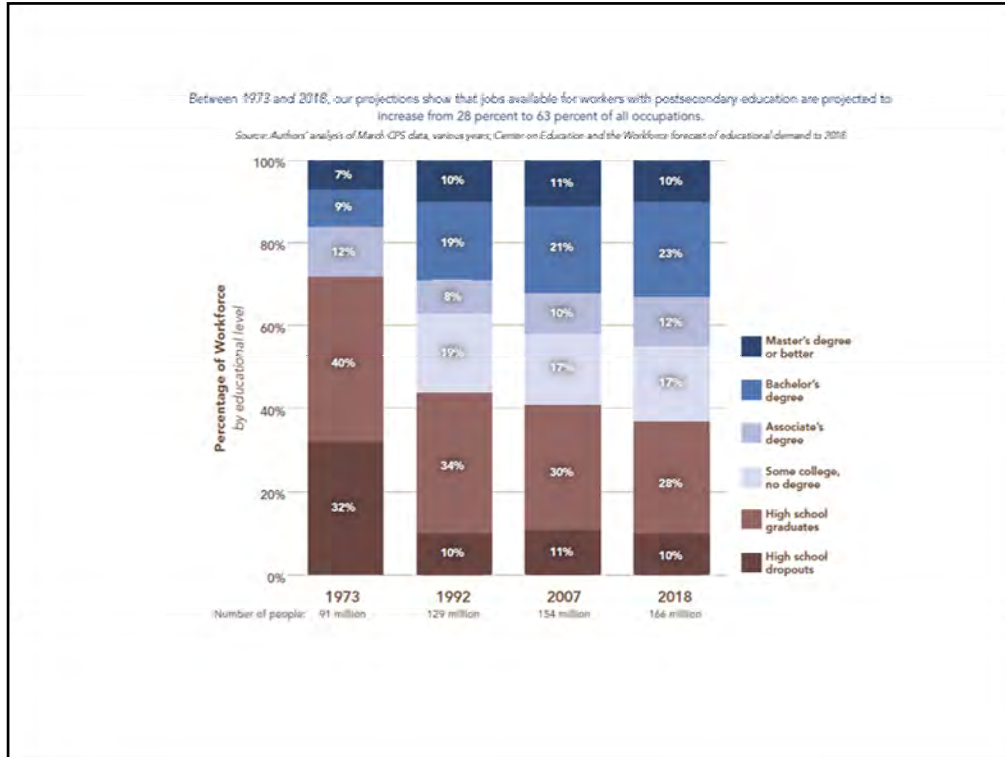
*source: U.S. Bureau of Labor Statistics  
Georgetown U. Center on Education and the Workforce*



- We have the Baby Boomer generation retiring in ever-greater numbers while we have half the number of new candidates preparing to fill those vacancies



- We also have a skills gap issue – good jobs are available but we don't have the qualified candidates who are able to fill the positions – there is a skills deficit
- 80% of manufacturing employers report not being able to find individuals with the right skills for the job (source: Nat. Assn. of Manufacturers)
- The energy utility industry is facing a potential workforce crisis over the next five to ten years. By 2012, the following job classifications will have large numbers of employees eligible to retire (source: Center for Energy Workforce Development):
  - More than half of all non-nuclear power plant operators
  - 52% of generation maintenance technicians
  - 40% of all transmission and distribution workers
  - 46% of engineers
- Many other industries are facing the same challenges



- This graphic shows that today's workforce opportunities will require higher forms of educational attainment and that will increase as we head into the future (source: Georgetown University's Center on Education and the Workforce)
- Postsecondary education has come to mean anything above high school graduation
- You will also note that there is a new category between Associate's degree and high school graduation that appears – some college. Many students who are current dropouts or high school graduates are going to need more than a high school degree in the future to find employment or reach their career goals.

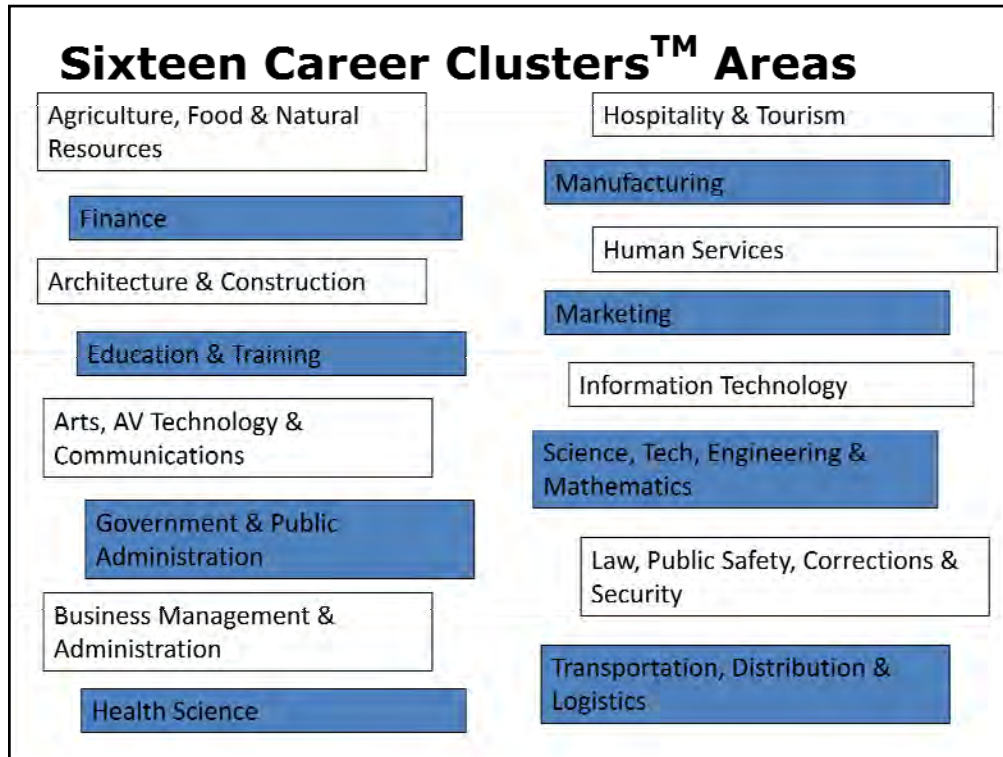
# Career Readiness

## Three key components:

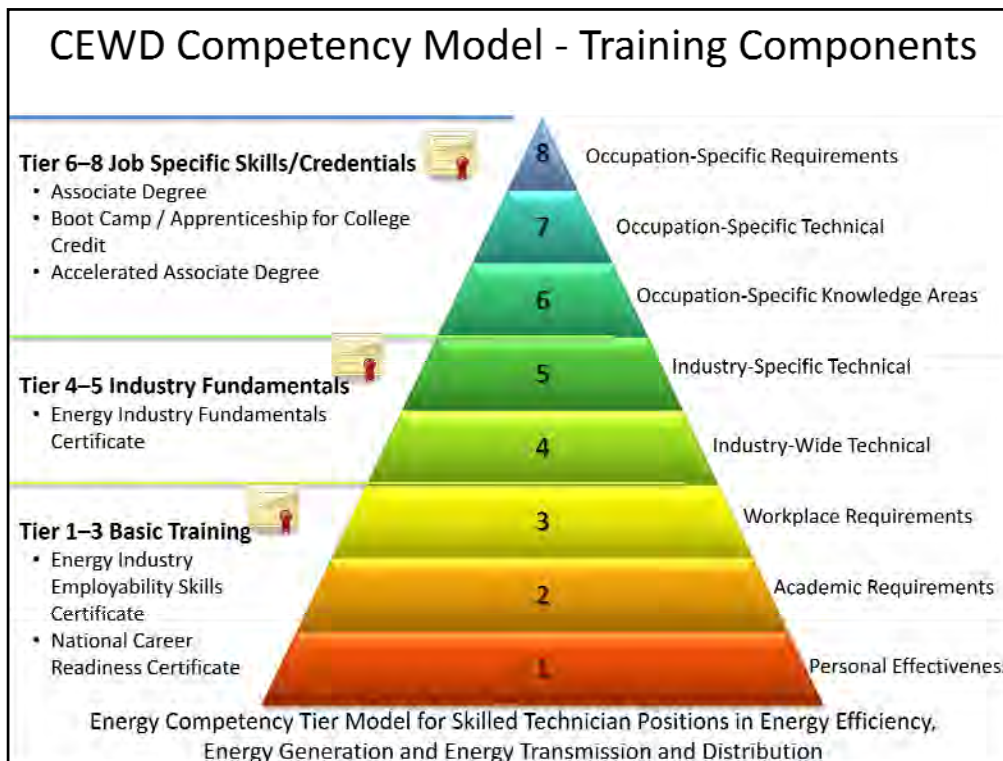
- Academic skills
- Employability skills
- Technical skills



- The factors illustrated on the previous slides indicate it is clear that we have to focus on ensuring more students graduate with increased knowledge and skills attainment
- College readiness and career readiness have different meanings. There is great overlap in the two issues but when you think about college readiness as it is defined today, it primarily focuses on academic preparedness.
- Academic skills are critical and there is much focus on this topic – rightly so. But, career readiness encompasses more than academic skills.
- ACTE has developed a career readiness definition. Other organizations may organize these components differently, but all students need these three skill sets in order to be truly career ready:
  - Academic skills
  - Employability skills
  - Technical skills
- Students need foundational academic skills such as literacy and math skills and they need to be able to apply those skills (more needs to be done to focus on helping students understand and apply what they have learned)
- Employability skills are also referenced as “21<sup>st</sup> century” and “soft” skills such critical thinking skills, working on a team and getting to work on time. Business and industry tell us these skills are lacking in many candidates – even college graduates.
- Technical skills are the skills specific to a particular career or industry such as being able to take a temperature or perform surgery in the health care field, or being able to operate a piece of manufacturing equipment
- Students will need varying degrees of ability depending on the fields they enter and positions they fill. Education fills that role, whether it be delivered in an academic setting, via CTE, online or even in the workplace.
- It is important that we think about how to effectively help students acquire these three skills sets and provide multiple pathways to reach their career goals.



- In career and technical education, 16 career clusters have been developed by the National Assn. of State Directors of CTE. These career clusters organize the many different career pathways that students may pursue.
- The individual career pathways within these career clusters map the CTE and academic courses a student needs and help define the certifications and degrees needed for the pathway. This provides students with a clearer understanding about what they need to do to be career ready.
- NASDCTEc is currently working to crosswalk these 16 career clusters – which have been adopted in some form by most states – to the Common Core state standards that are being developed.
- Perhaps most importantly, the career clusters include knowledge and skills statements developed by business and industry. The connection to business and industry is critical since students will ultimately be seeking employment and employers know best what students need to know and be able to do for the jobs that are available.



- In addition to associate's and baccalaureate degrees, certificates and credentials are going to be very important to filling the skills gap and supporting students/potential employees for available positions.
- Jobs for middle skill workers (jobs for workers with some college, a certificate, or an Associate's degree) will make up 29 percent of the workforce by 2018. (source: Georgetown University's Center on Education and the Workforce)
- It is important to identify the credentials that have value. In many cases, employers will be in the best position to determine value.
- Stackable and portable credentials provide value by establishing a systematic progression of skills measures which can be powerful by helping students to acquire the needed skills for the available jobs that employers need filled – so we can close that skills gap.
- ACTE has been working with the Center for Energy and Workforce Development – an industry-driven organization made up of the providers of energy (e.g. electric, nuclear) as they have developed their competency model. The competency model was developed to address the skills gap employers in the energy sector are facing.
- This graphic provides a good visual of how stackable credentials and degrees can work.
- The bottom three layers of the pyramid are the fundamental skills that students will need. Essentially it is the basic academic, employability and technical skills that students learn in secondary school. You will note that this model includes use of the NCRC and Energy Industry Employability Skills Certificate.
- We move up the pyramid to Tiers 4-5 which focuses on industry fundamentals – more specific industry training and the requirement of the Energy Industry Fundamentals Certificate.
- Finally, tiers 6-8 at the top of the pyramid address occupation specific knowledge and skills requirements, culminating in an associate degree.
- Each tier contains specific benchmarks, which helps the student and employer to identify the skills needed/acquired.

## Contact Info

Association for Career and Technical Education  
1410 King Street  
Alexandria, VA 22314  
(800) 826-9972  
[www.acteonline.org](http://www.acteonline.org)

Steve DeWitt - [sdewitt@acteonline.org](mailto:sdewitt@acteonline.org)

