

**ABSTRACT FOR 7 DEC 2018 DUPONT SUMMIT 30-MINUTE PANEL DISCUSSION:
“Education & Workforce/Naval STEM in the Emerging Context of the Dept. of Education
and Workforce”**

The Department of the Navy (DoN) has notable challenges spanning from ocean depths to surface waters and land through the air and into space. Such challenges include finding missing aircraft and maritime vessels, protecting commerce on the oceans and life in communities on the land, and safeguarding communications and navigation technologies in space. DoN includes Navy ships, SEAL teams, and the Marine Corps, fulfilling many roles including being global first-responders following natural disasters and disease outbreaks, managing threats on foreign soil, safeguarding civilian and uniform workers around the world, and developing more effective and efficient ways to overcome these challenges.

Inspiring, acquiring, and constantly developing workers with needed STEM capabilities to develop and deliver innovative successful solutions to Naval challenges is the mission of the Education & Workforce/Naval STEM (E&W/Naval STEM) office. This 2018 Dupont Summit panel will discuss the philosophy and operations of E&W/Naval STEM in the current context of the Administration proposing to merge the Departments of Education and Labor (to be called the Department of Education and Workforce, Dept. of E and W) to improve the effectiveness and efficiency of developing and delivering Americans with needed capabilities to U.S. workplaces.

A notable characteristic of the Administration’s proposed Dept. of E and W is the vital role to be played by Career and Technical Education (CTE). CTE is a term commonly used to describe institutions (such as schools) and education and training programs focused on applied sciences, modern technologies, skilled trades, and career preparation. Pursuing CTE can result in professional certifications or licenses on a path different from earning a degree in education, usually at a college or university.

CTE, in synergistic synchrony with degree education, can increase efficiency and effectiveness of developing and delivering workers with needed STEM capabilities, to uniform and civilian workers and to society. While there is generally widespread familiarity with degree education (ranging in disciplines and investments, e.g., from a Bachelor’s degree in engineering to a Doctor’s degree in medicine), there are important but less familiar characteristics of CTE to highlight, especially in relation to DoN.

CTE and DoN share many similarities with respect to training and educating students and uniform personnel, respectively. CTE trains and educates individuals in particular career fields, such as computer programming, networking, healthcare, and welding. CTE has much in common with primary schools used by various branches of the armed forces, such as the Navy’s A-schools, to train enlisted service-members in their chosen area of specialty. CTE, like A-school, can quite rapidly develop and deliver workers with needed worker capabilities. Work skills and capabilities are beneficial not only to individual workers but also to the armed forces, local communities, the education system, and transitioning Veterans. Transitioning service-members with desired skills in CTE can find careers in career and technical education, potentially helping recruit promising, qualified individuals directly that meet military criteria for service, reducing costs associated with separating recruits not fit for military service. Local communities benefit from having such Veterans impart their expertise at their level for the benefit of local economies, especially when certain skills are not locally available. Teacher shortages exist or are anticipated in many communities, and education systems would benefit from trained Veterans to help fill such gaps. Briefly, a synergistic synchrony among

CTE, the degree education system, transitioning or reserve service-members, and DoN could mean reduced costs to train and recruit for both the education system and DoN. For Veterans, it could mean an easier transition to civilian life while maintaining qualifications in their area of expertise developed throughout their military careers. Additionally, if such Veterans are retained as reservists, DoN could further benefit from having access to a ready-trained pool of individuals whose skills and qualifications continue to be maintained regularly, through the education system and at reduced or no cost to DoN.

The Administration's reports and exploration of elevated roles for CTE in the proposed Dept. of Education and Workforce could mean new opportunities for civilian and uniform workers, reservists, Veterans, spouses, survivors, dependents, and their communities.

Our E&W/Naval STEM panel will include Dr. Michael Simpson (Dir. of E&W/Naval STEM), CDR Cesar Padilla (education PhD-candidate at Penn State University + DoN Reservist), Kathleen Miranda (Deputy E&W and DoD STEM Advocate of the Quarter), Ericka Rojas (communications lead), and Chrissy Grassman (financial lead).

Panel Timing Schedule 7 Dec 2018 Dupont Summit		
START 1 min	General welcome	Michael
3 mins	E&W/Naval STEM, wide range of interlinking aspects of Naval STEM, education, outreach, training → team self-introductions	Michael
5 mins (1 min each person)	Self-introductions	Kathleen, Cesar, Ericka, Chrissy
4.5 mins	<ol style="list-style-type: none"> 1) Administration on Dept. of Education and Workforce, elevation of CTE (1 min). 2) Similarities and strengths of CTE and DoN/DoD training (3 mins). 3) Very brief transition to Naval STEM outreach and education (0.5 min) 	<ol style="list-style-type: none"> 1) Michael 2) Cesar 3) Michael
8 mins	<ol style="list-style-type: none"> 1) E&W/Naval STEM in communities (2 mins) 2) E&W/Naval STEM education grants (2 mins) 3) E&W/Naval STEM communications (2 mins) 4) E&W/Naval STEM finances (2 mins) 	<ol style="list-style-type: none"> 1) Kathleen 2) Michael 3) Ericka 4) Chrissy
Remaining time (8 mins)	<ol style="list-style-type: none"> 1) Questions, answers, discussion 2) Wrap-up and challenge (0.25 min) 	<ol style="list-style-type: none"> 1) All 2) Michael
30 mins total		

[Submitted by Michael.M.Simpson1@navy.mil](mailto:Michael.M.Simpson1@navy.mil) (updated 9 Nov 2018)