Internships and Apprenticeships

August 18, 2016

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CCTA | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE

Webinar Details

- For this webinar you will be in listen only mode using your computer or phone
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Disclaimer: This material is based upon work supported by the National Science Foundation under Grants # 1205077 and # 1261893. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

The CCTA IS Led By

- **National Center for Convergence Technology (CTC)** at Collin College in Frisco, TX (lead)
- **South Carolina ATE National Resource Center (SCATE)** at Florence Darlington Technical College in Florence, SC
- **Florida ATE Center (FLATE)** at Hillsborough Community College in Tampa, FL
- **Bio-Link Next Generation National ATE Center for Biotechnology and Life Sciences (Bio-Link)** at City College of San Francisco in San Francisco, CA
- **Networks Resource Center** at the Maricopa Community College District in Phoenix, AZ

CCTA Purpose

- Respond to a request from the Department of Labor (DOL) to the NSF to have ATE Centers provide technical assistance services to DOL TAACCCT grantees
- Activities relevant for DOL grants, NSF grants and workforce-oriented programs of all kinds
- Deliverables
  - Topical webinars on existing and new solutions
    - Live/recorded with attendee Q&A
  - Identify and document best practices
  - Host convenings

Poll #1: Your Affiliation

A. I am involved with an NSF grant
B. I am involved with a TAACCCT grant
C. Both
D. Neither

Poll: How many people are listening with you?

A. None
B. 1
C. 2
D. 3 or more

TODAY'S PRESENTERS

Elaine Craft
Executive Director & PI
SC ATE Center
CCTA Host

Ann Beheler
Executive Director & PI
Convergence Technology Center
CCTA Webinar Moderator

Rick Roberts
Assistant Director
SC ATE Center
Presenter: Internships

Barbara Murray
Executive Director & PI
SMART Center
Presenter: Apprenticeships

Lois McIntosh
LMcIntosh Career Workforce Consulting,
Discussant

Internships

- ✓Internship Elements
- ✓The South Carolina ATE Model
  - Purpose
  - Design
  - Program Review/Feedback

Poll: Internship Participation

A. I am involved in maintaining an Internship Program
B. I am interested in beginning or expanding an internship program
C. I am not involved with an internship program at this time

Internship Elements

- Disciplines & Qualifications
- Time of Year & Duration
- Hours
- Paid/Unpaid
- Credit/Not-for-Credit
- Insurance/Benefits
- Monitoring/Evaluation

SC ATE Internship and Industry Consortium Model

Our Premise/Purpose:

- Makes learning relevant
- Promotes student employability
- Employers build their own future workforce
- Industry consortium bylaws level the playing field
- College provides flexibility to align with industry needs

Internship and Industry Consortium Model

Industry partnership elements:

- Employers within consortium define the program parameters (all day, year round, pay etc.)
- Starting pay for all Industry Consortium members is equal
- Participating companies agree not to hire prior to graduation from FDTC

Internship and Industry Consortium Model

Industry Collaboration:

- Essential
- Sustainable
- Flexible

Internship and Industry Consortium Model

ATE Student Intern Qualifications:

- Disciplines
  Computer Technology/Network Systems Management, Industrial Technology, or Engineering Technology
- GPA Requirements
- Hours-Work-Flexibility

Internship and Industry Consortium Model

How the SC ATE Center/FDTC Internship Works

- Paid internships – not tied to academic credit
- Course scheduling by college to accommodate T & Th full-day internship work
- Duration – can begin in 2nd semester & continue through graduation
- Hours limited to 20/wk. (exceptions only if GPA>3.0)

SC Internship and Industry Consortium Model

How the SC ATE Center/FDTC Internship Works

- Benefits/Insurance – depends on company & how student is paid
  - College student insurance covers work-based learning
  - Other benefits only if employer provides

- Payment methods
  - Industry hires/pays intern
  - Intern hired through an employment agency (1st ~ 3 mo.)
  - Intern paid via stipend donation to FDTC Foundation

SC ATE Internship and Industry Consortium Model

FDTC Foundation Payment Option:

- Paid a stipend at hourly rate for hours worked
- Paid bi-weekly
- Students receive 1099 form at year end
- Foundation staff
  - Facilitate security background checks
  - Arrange for drug screening
  - Pay interns
  - Invoice employers for intern payments and service charge
- Service Charges go to the ATE account in the Foundation to support student recruitment, ATE student activities, and SC ATE Industry Consortium meeting expenses.

SC Internship and Industry Consortium Model

College Flexibility and Support:

- Managed by college staff in SC ATE Center
- Collaboration with faculty & employers
- Coordinated with other benefits for ATE Students

- Evaluation

Internship and Industry Consortium Model

- Students
  - Provides paid work experience in a related field
  - Provides better-than-minimum wage employment
  - Leads to employment after graduation
- Employers
  - Expanded access to engineering/industrial technicians
  - Opportunity to screen and select interns
  - Flexible-length internships
  - Opportunity to grow a future, job-ready workforce

Cost-effective public-private partnership that supports economic development

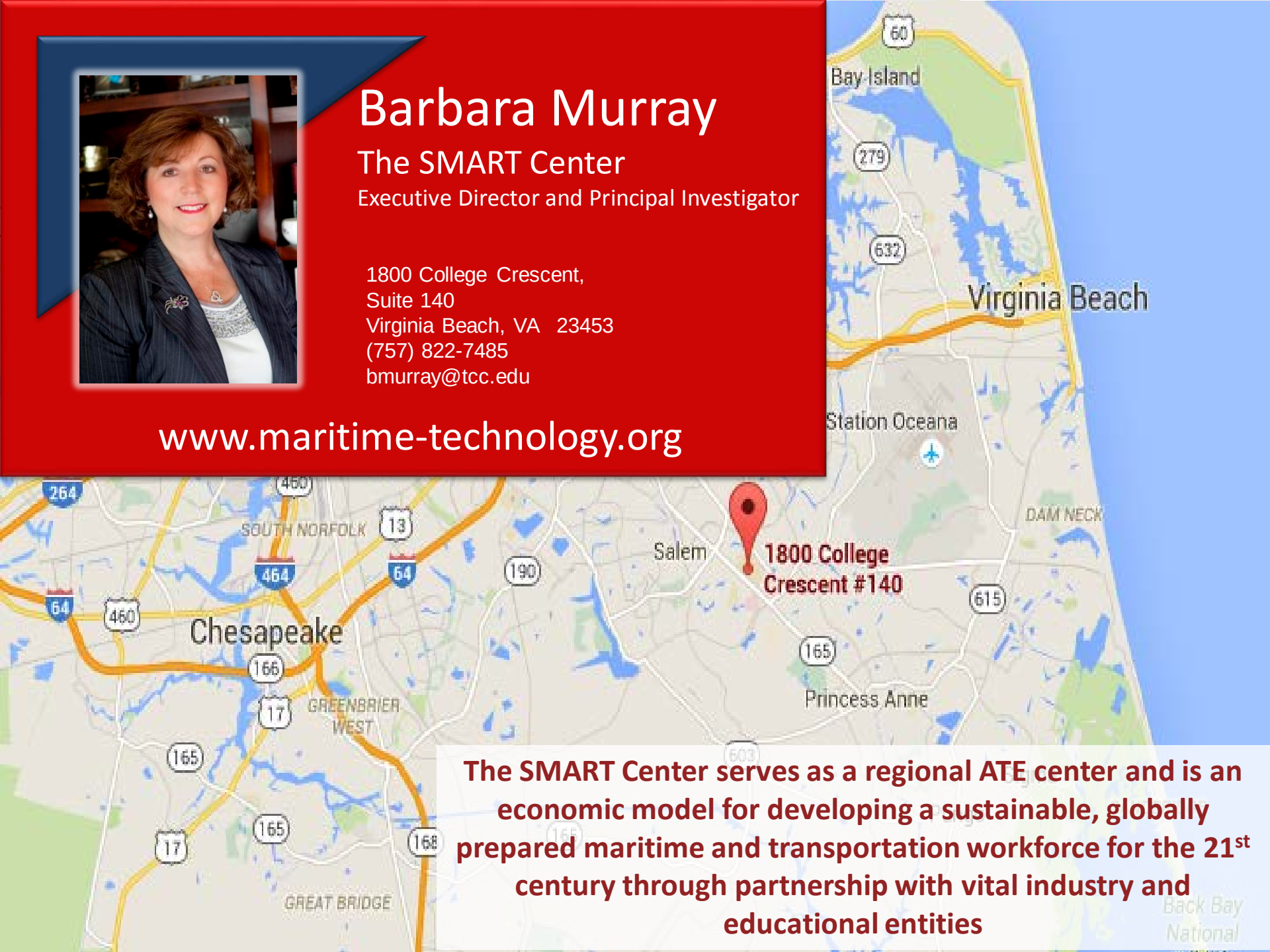
Barbara Murray

The SMART Center

Executive Director and Principal Investigator

1800 College Crescent,
Suite 140
Virginia Beach, VA 23453
(757) 822-7485
bmurray@tcc.edu

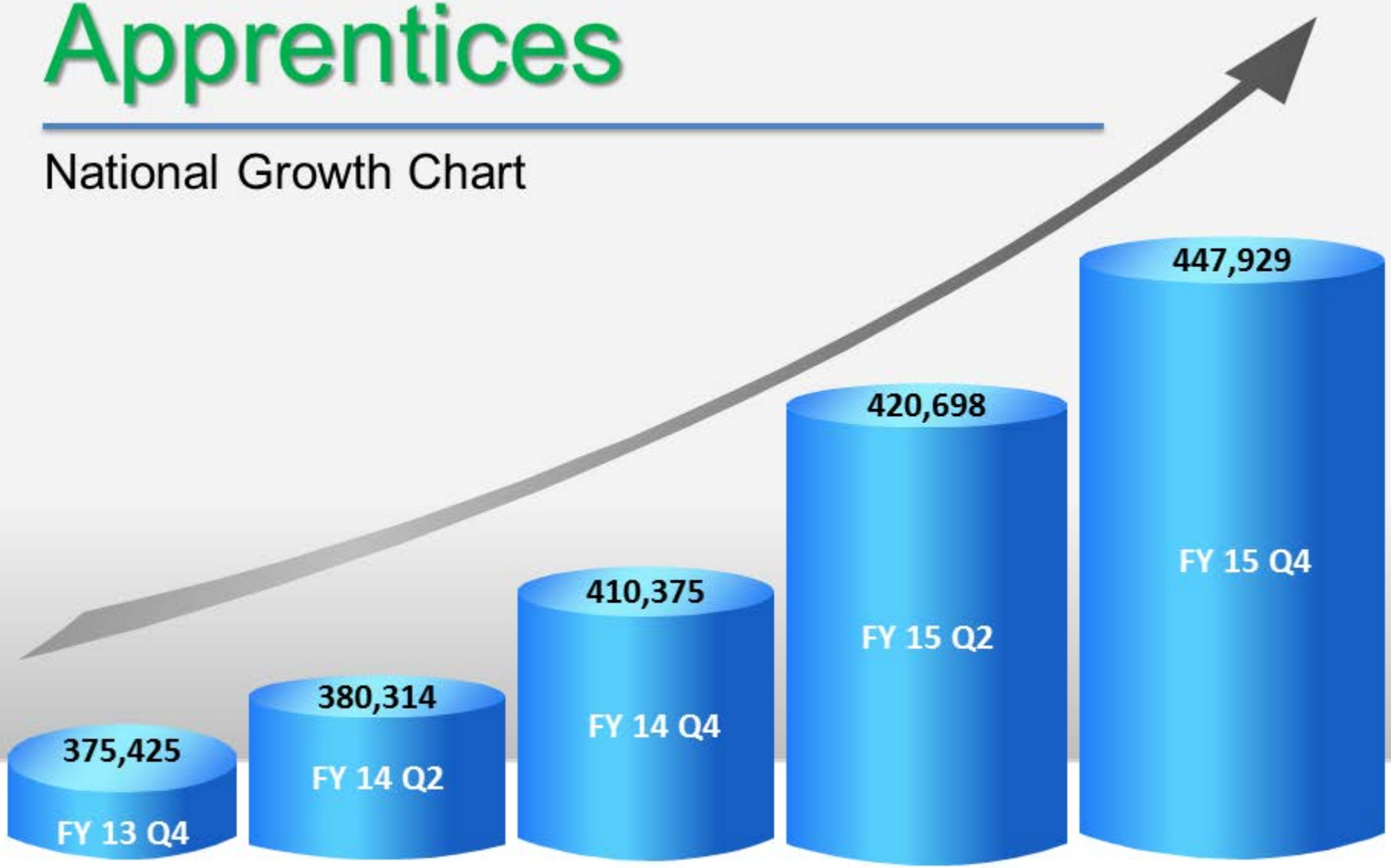
www.maritime-technology.org



The SMART Center serves as a regional ATE center and is an economic model for developing a sustainable, globally prepared maritime and transportation workforce for the 21st century through partnership with vital industry and educational entities

Apprentices

National Growth Chart



What is registered apprenticeship?

Employer Involvement

Structured On-the-Job Learning

Related Training and Instruction

Rewards for Skill Gains

National Occupational Credential

Five Core Components of Registered Apprenticeship

Registered Apprenticeship Facts and Figures

Did You Know?

150,000

Employers and Labor Management Organizations Participate in Registered Apprenticeship.

400,000

Registered Apprenticeships Nationwide in More than 1,000 Occupations.

$50,000

Average Starting Salary of Apprentices Per Year While Earning a Credential Equivalent to a 2 or 4 Year College Degree

$300,000

Amount Workers Who Complete Registered Apprenticeship Programs Earn More Over a Lifetime Than Peers

$1.47 per $1.00

For Every $1 Spent on Registered Apprenticeship, Employers Get an Average of $1.47 Back in Increased Productivity

Registered Apprenticeship By the Numbers

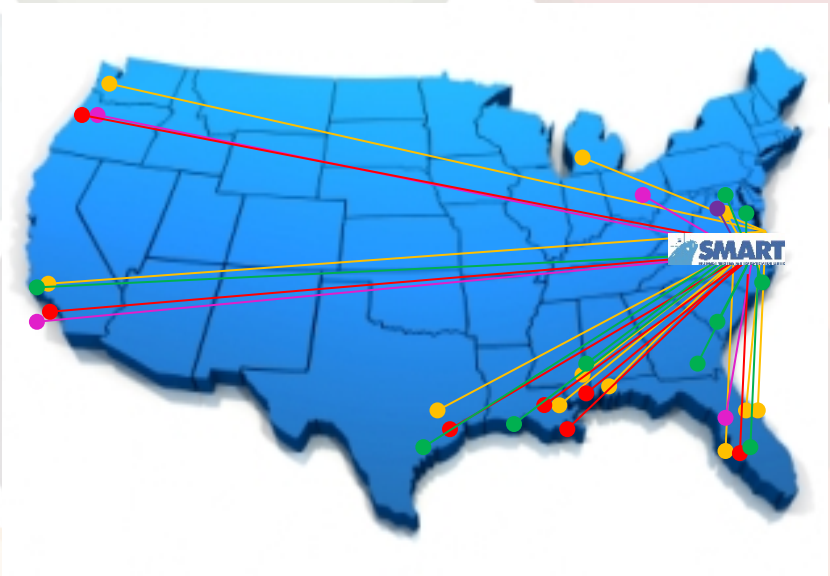
456,989 Current Number of Apprentices

200,000 New Apprentices in 2015

50,000 Completed Apprentices in 2015

20,000 Active Programs in 2015

Regional and National Apprenticeship Partnerships



Newport News Shipbuilding
A Division of Huntington Ingalls Industries

SMART
SOUTHEAST MARITIME AND TRANSPORTATION CENTER

DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

DEPARTMENT OF LABOR
UNITED STATES OF AMERICA

THE PORT OF
VIRGINIA

BAE SYSTEMS

AMSEC
A Subsidiary of Huntington Ingalls Industries

AUXILIARY SYSTEMS
INCORPORATED

MARITIME ADMINISTRATION
1950
UNITED STATES OF AMERICA

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1706
BALTIMORE

PORT OF HOUSTON AUTHORITY
PHA
HOUSTON, TEXAS

OCEANEERING

GENERAL DYNAMICS

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- Job Tasks – Developed with Industry/Employers
- Minimum of 2,000 Hours = One Year of Training
- Over 1,000 Apprenticeable Occupations
- Real World Environment

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New "Make the SMART Choice" Video Shows how Maritime Offers Step t...

The SMART Center has released a new installment in its "Make the SMART Choice" video series showing how today's maritime industry employers are offering workers a great pathway into stable, great-paying careers. The video tells the story of how Auxiliary Syste...

Read more about this

SMART Center PI, US Department of Labor Office of ...

Laura Ginsburg, Team Leader at the U.S. Department of Labor's Office of Apprenticeship, invited SMART Center P...

Virginia Business Recognizes SMART Center and TCC ...

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Virginia Maritime Association Releases Economic Im...

The Virginia Maritime Association recently released The Economic Impact of Virginia's Maritime Industry - The ...

Why Smart?

The Southeast Maritime and Transportation (SMART) Center is the only National Science Foundation Advanced Technology Education (NSF ATE) Center solely focused on increasing the number of well-qualified, skilled technicians in the maritime and transportation industry.

Read more about SMART

Featured Careers

Ship Pilot
1) Consult maps, charts, weather reports, and navigation equipment to determine and direct ship movements.2) D... read more

Second Mate
The second mate is responsible for maintaining the bridge navigational and communications equipment as well as

Upcoming Events

August 2016

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20

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Apprenticeship

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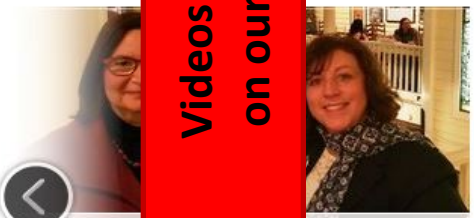

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Make the SMART Choice: Maritime Apprenticeships Lead to Broad Opportunities On and Off the Wate

Why registered apprenticeship?

Build a Competitive Workforce

Employers Facing Complex Workforce Challenges in Competitive Domestic and Global Markets

Time-Tested Model

Proven Strategy for Recruiting, Training and Retaining World-Class Talent Used by Industry for Decades (and longer!)

Adaptable and Flexible

Registered Apprenticeship is a Solution and Can Be Integrated into existing Training and Human Resources Development Strategies!!!

Registered Apprenticeship Credentials

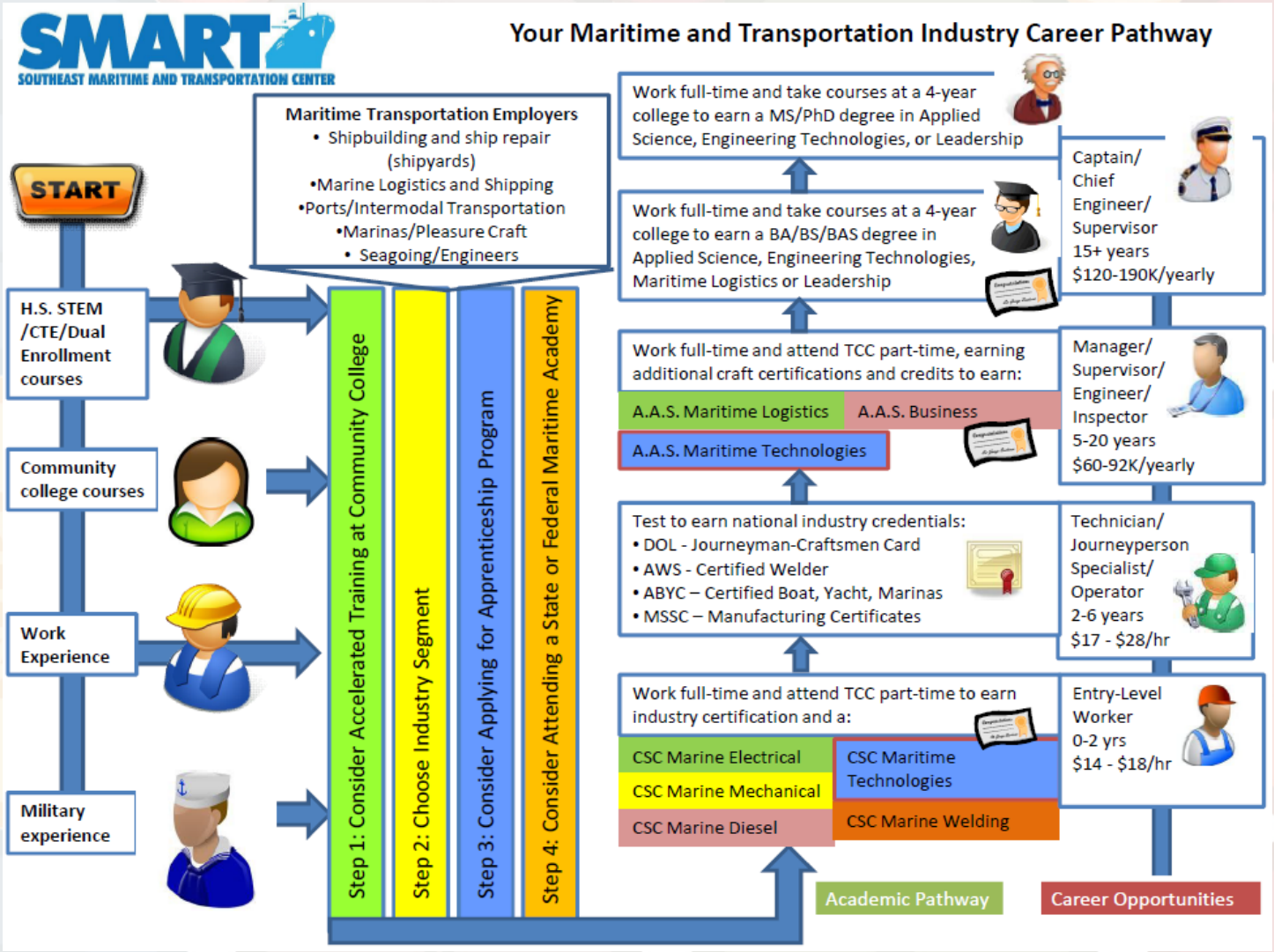
Employer Credentials

- ✓ Nationally Recognized Certificate of Registration
- ✓ National Recognition as an ApprenticeshipUSA LEADER

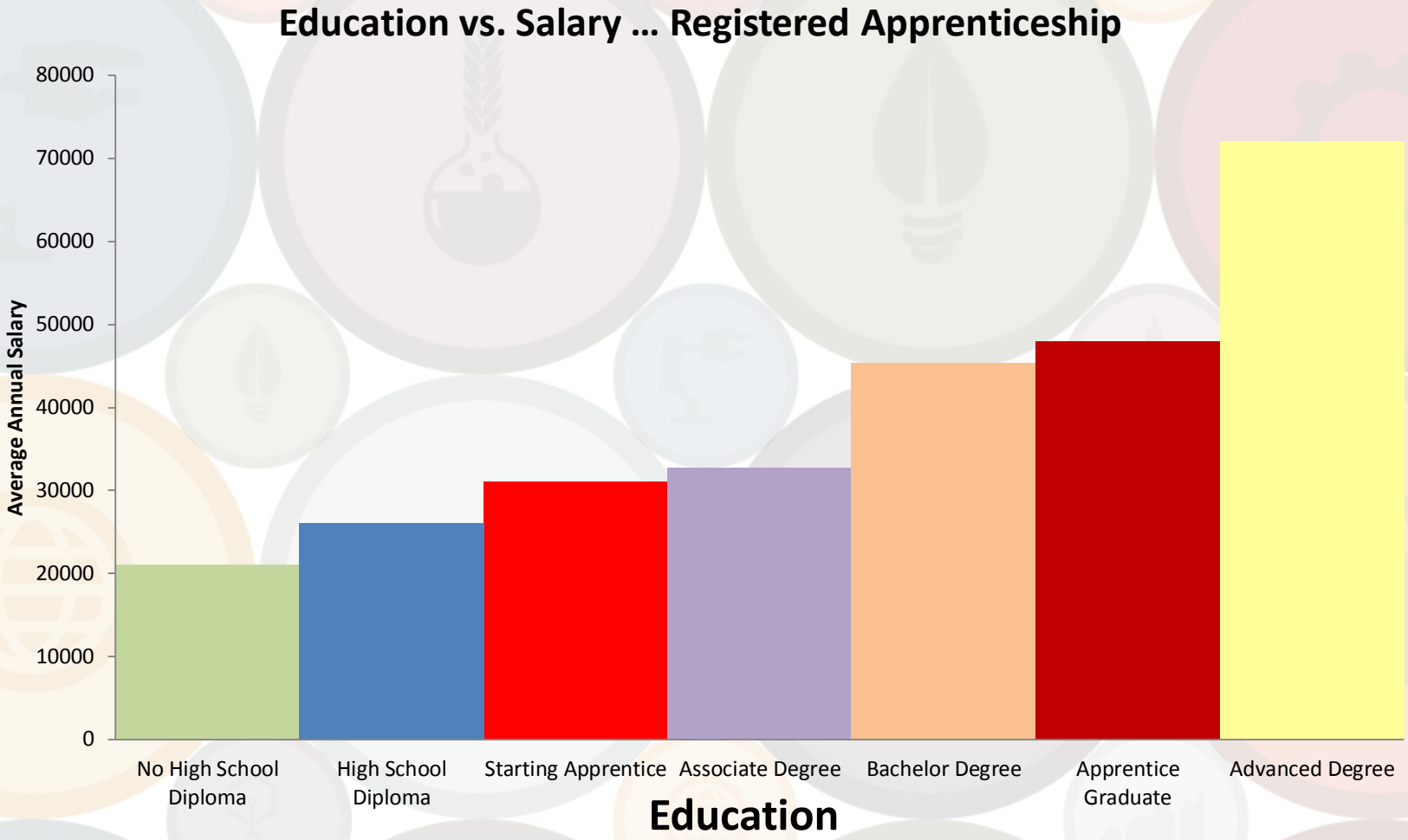
Apprenticeship Credentials

- ✓ Nationally Recognized Certificate of Completion
- ✓ Interim Credentials
- ✓ Stackable Credentials
- ✓ Opportunity to Earn College Credits, Certificates, Diplomas & Degrees

SMART Maritime Career Pathways With Registered Apprenticeship



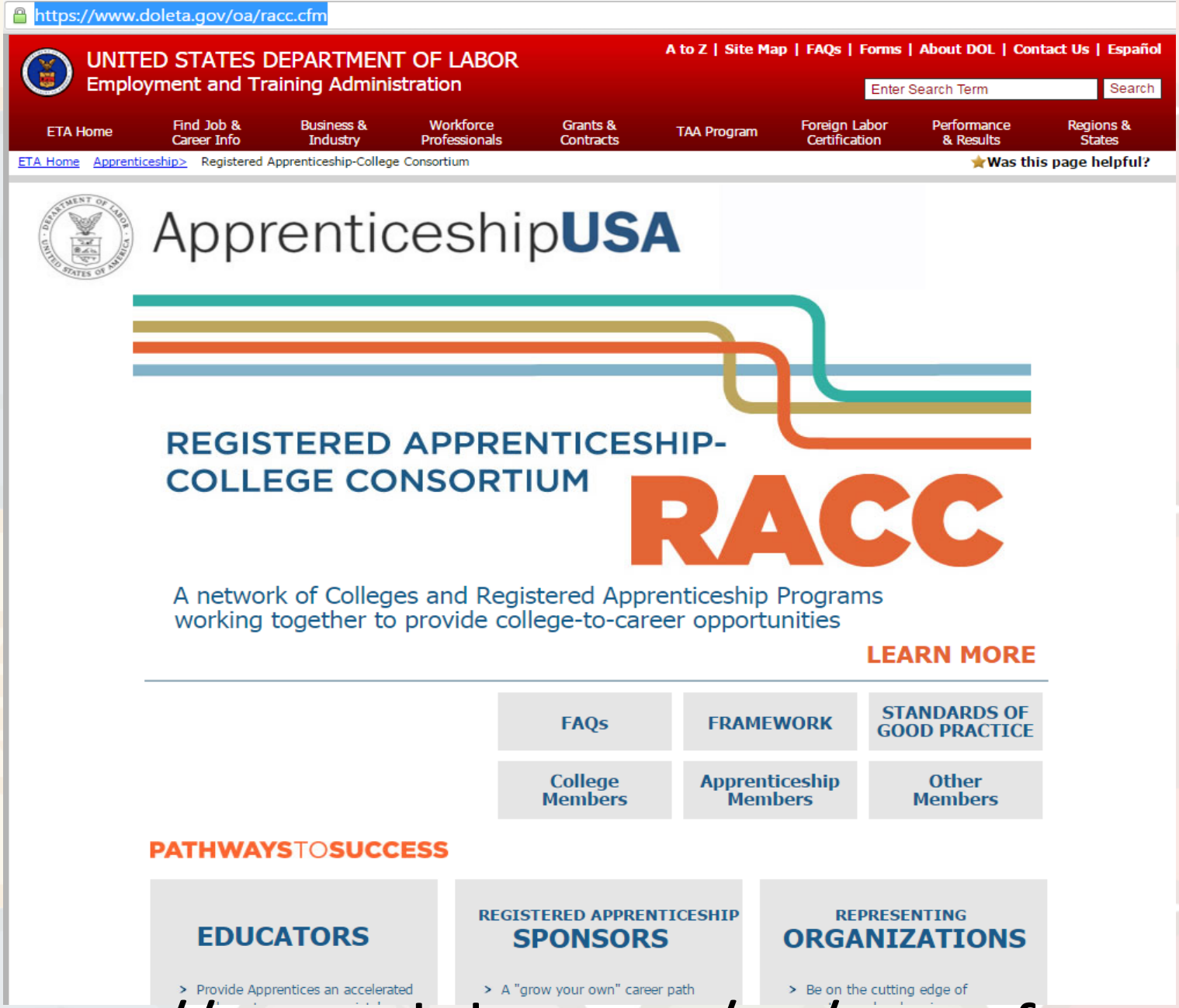
Apprentices “**earn and learn**”,
resulting in higher pay from the beginning and early graduation.



Most new apprentice graduates earn more than students graduating with a Bachelor’s degree.

Education in Maritime and Transportation Pays

Education/Experience	Maritime Jobs	Pay Range	Transportation Jobs
Master's Degree / Bachelor's Degree with Experience	• Industrial Engineer • Nuclear Engineer • Project Supervisor • Electrical Engineer • Mechanical Engineer	**$75K - $100K** Yearly	• Industrial Engineer • Supply Chain Manager • Electrical Engineer • Civil Engineer • Captain
Bachelor's Degree	• Production Manager • Health & Safety Inspector • Logistics Manager	**$60K - $90K** Yearly	• Transportation Manager • Distribution Center Supervisor • Ports Logistician • Ocean Engineer
Registered Apprenticeship / Journeyman	• Marine Welder • Inside/Outside Machinist • Shipfitter • Rigger	**$41K - $68K** Yearly	• Freight Forwarder • Marine Designer • Longshoreman • HVAC Technician • Welder
Associate's Degree / Certifications or College Coursework & 1-2 Years Experience	• *Electrical Technician* • Mecatronics Tech • CAD/Designer • Marine Maintenance • Instrumentation	**$17 - $26** Hourly	• Production/Planning Clerk • Crane and Tower Operator
Intensive Training Programs	• Certified Welder • Maritime Electrician • Mechanics	**$15 - $25** Hourly	• Rail-Track Laying and Equipment Operator • Heavy Vehicle Service Tech
High School Diploma or GED	• Welder • Helper • Fire Watch	**$8 - $15** Hourly	• Freight, Stock and Material Mover • Shipping, Receiving and Traffic Clerk



https://www.doleta.gov/oa/racc.cfm

Questions?

The Nuts & Bolts of Work-based Learning Opportunities

- When to place students?
- How to prepare employers as hosts?
- How to organize within your institution?
- How to prepare students for success?
- How do you facilitate good matches?
- What about evaluation?

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September 15, 2016
Using Social Media to Promote and Achieve Grant Outcomes
Social media is used for informal communication by most and is used by companies for a host of activities including marketing. The session will cover the top tools used for social media and the broad usage by people of all ages. How people's willingness to share openly about themselves through social media, turns social media into a tool for reaching a greater audience to promote a college program and to gather evidence to meet grant outcomes.
Presenters:
Ann Beheler PI, Executive Director of Emerging Technologies; Gordon Snyder Associate Director of National Center for Optics and Photonics Education (OP-TEC)

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Contacts

- Rick.Roberts@fdtc.edu
- Brmurray@Outlook.com
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