# **Next Steps for STEM Schools**

9/30 - 10/2 Charleston Conference Wrap-Up Workforce Development Pathway

## Block One - Digital Learning and NSF ATE Centers

#### Call to Action Group Feedback:

- Increase awareness more broadly (the state) of ATE and support further expansion
- Online visualization of physical activities (video)
- Expand into new subject areas (Example: K-12 experiences)
- Push interactive virtual engagement earlier in the academic setting (K-12) to influence STEM interests

### **™** Notable Twitter Quotes:



CUCWD @ClemsonCWD - 30 Sep

"Follow the jobs. Where the jobs are going will dictate where you need to emphasize your education effort." Bob Feldmaier Macomb CC



Melissa Zelaya @MeliZelaya - 30 Sep

STEM in wine making? Of course! Chemistry is essential for a great glass of wine. #NSIworkforce @ClemsonCWD



Melissa Zelaya @MeliZelaya - 30 Sep

"How do we listen to industry to bring excitement to manufacturing careers?" - Dean Gramopadhye @ClemsonCWD #NSIworkforce



CUCWD @ClemsonCWD - 30 Sep

"In SC, education will lead to workforce development which will lead to economic development." Dr. Gramopadhye #NSIworkforce



# Block Two - Pathways, Stackable Certificates, and Technical College Collaborations

#### Call to Action Group Feedback:

- Broadcast the message beyond the typical group and players (outside of technical/ community colleges, workforce development organizations, etc...) but communicate more to parents, teachers, industry, etc...
- Regionally keep the military connection and connect with the entrepreneurial spirit
- Partnerships with LGU system nationally

### **Motable Twitter Quotes:**

CUCWD @ClemsonCWD - 30 Sep

"What makes people employable are technical skills, but what keeps them employed are the soft skills" - Butch Grover #NSIworkforce #NSI2013



CUCWD @ClemsonCWD - 30 Sep

"When industry tells us what they need, the technical college system reacts and makes it happen" - Dr Hope Rivers #NSI2013 #NSIworkforce



CUCWD @ClemsonCWD - 30 Sep

Can high school students be workforce ready? Certificate programs and early college programs can give them a STEP Up! #NSI2013#NSIworkforce



CUCWD @ClemsonCWD - 30 Sep

"We intentionally bring technical colleges and universities together with prospective industry to stay current" - Butch Grove #NSIworkforce



CUCWD @ClemsonCWD - 30 Sep

"The demand for workers in the STEM-related workplace is outpacing the available workforce." Galen DeHay -TCTC



# **Block Three - Industry Networking & Outreach**

#### Call to Action Group Feedback:

- Knowledge + Skills + Attitude = Workforce Development
- Learning outcomes = \$ Outcomes
- Industry Demand = Supply
- Training programs to match job requirements (DACUM)
- STEM opportunities early in students' careers

## **⋙** Notable Twitter Quotes:



CUCWD @ClemsonCWD - 1 Oct

"The days of grease & dirty plants are gone. Manufacturing is a whole different environment now." Warren Helm - Boeing #NSIworkforce



CUCWD @ClemsonCWD - 1 Oct

"Dream Connectors is a program exciting middle school students about STEM and advanced manufacturing." Paul Winston Michelin #NSIworkforce



CUCWD @ClemsonCWD - 1 Oct

"Business transformation supports global competativeness, STEM and critical thinking help teach this." Beth Jackson Fluor #NSIworkforce



CUCWD @ClemsonCWD - 1 Oct

"We cannot survive here without a future workforce. The workforce is our most critical need." Warren Helm - Boeing #NSIworkforce



**CUCWD** @ClemsonCWD - 1 Oct

"We need more STEM graduates, soon Boeing will have to recruit regionally; it is a war on talent." Warren Helm - Boeing #NSIworkforce



# Block Four - Developing the New Southern Economy: System Wide Efforts to Build the STEM Pipeline

#### Call to Action Group Feedback:

- From a systems perspective how do we address the pipeline earlier?
- We won't address the labor supply issue that our businesses need if K-12 doesn't shift to career awareness
  - Need more human capital in schools teaching and instructing
  - Need to give specifics and supports over a sustained period of time to middle and high schools
  - Need to catch students early
  - Need more action
  - Need to better link K-12 to workforce needs
- Schools get overwhelmed and don't get to know the students as well which may result in not being able to advise them in career and educational choices as well
- Anywhere, anytime learning needs to be increased: After school and programs, apprenticeships, partnerships with businesses, project based learning, and work experience
- There is a disconnect between schools and programs we need greater connections

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CUCWD @ClemsonCWD - 1 Oct

"2 trends emerging in SC landscape: globalization and automation" David Clayton SC Dept of Commerce #NSIworkforce



CUCWD @ClemsonCWD - 1 Oct

"We've recruited 33,000 jobs, \$9B in capital investments, and 270 companies to SC." David Clayton SC Dept of Commerce #NSIworkforce



**CUCWD** @ClemsonCWD - 1 Oct

"College students are increasingly older (40% 24 yrs) and minority (2020 45% of grads non-white)." George Hynd College of Chs #NSIworkforce



# Block Five - Economic Development: Improving SC Quality of Life through Economic Development and STEM Initiatives

#### Call to Action Group Feedback:

- Create a connection between stackable credentials and lifelong learning with economic development
- Businesses could provide more visual and hands on opportunities to learn about educational options
- Educational focus on computer science is needed

## **™** Notable Twitter Quotes:



CUCWD @ClemsonCWD - 2 Oct

"There is a bit if entrepreneurial spirit in all of us - it is the cultivated and learned." Karl Kelly Clemson #NSIworkforce



CUCWD @ClemsonCWD - 2 Oct

"Unemployment rate for Gulf era SC veterans 18-25 was 20% in 2012." Mac Horton Clemson #NSIworkforce



CUCWD @ClemsonCWD - 2 Oct

"We are linking the university to industry and working on real systems." Nick Regas Clemson #NSIworkforce



CUCWD @ClemsonCWD - 2 Oct

"We're trying to convince people that farming is a high science and engineering career." George Askew Clemson #NSIworkforce



CUCWD @ClemsonCWD - 2 Oct

"If we don't get kids to fill jobs industry will leave. The only way to stay ahead is innovation." John Kelly VPClemson Econ Dev #NSIworkforce

