North Alabama

Workforce Summit Day One Recap

Setting the Stage

Lay the foundation to help our young people identify career paths and educational opportunities to meet the industry needs of tomorrow.

Jamie Francis US Chamber of Commerce Foundation

- It is not about 4 pillars of learning, it is a continuum: early childhood education, K-12, post-secondary, 4 year, and continuing education
- The audience was challenged to examine the mindset of post-secondary being 4 year college, master's, and PhD....is this the right way to think? Is it working for us today?
- Statistics identifying
 - Lack of proficiencies in mathmatics, science, and reading
 - Low graduation rates for African American and Hispanic students
 - Significant number of underemployed workers
 - Executives see a serious gap in workforce skills and are struggling to fill jobs
 - US is falling behind Organization for Economic Co-operation and Development (OECD) countries in mathematics, science, and reading/literacy
- There is an Honesty Gap between state testing and the National Assessment of Educational Progress (NAEP) resulting in a false perspective regarding student achievement
- The states need to adopt higher standards to set the foundation of what needs to be achieved
- There is an anticipated 26% skills gap due to a lack of post-secondary credentials in the state workforce

Jamie Francis US Chamber of Commerce Foundation

- Identified opportunities for business leaders to support K-12
 - Know your what your state is up to
 - Advocate for high-quality standards and aligned assessments
 - Prepare the public for an anticipated drop in test scores
 - Engage in the public dialogue via social media, op-eds
 - Form partnerships between business and education to help students and parents know what it takes to be career ready
 - Develop informational tools and resources to educate business leaders in your state
- Introduced the concept of talent pipeline management applying supply chain management practices to talent management

Best Practices Spotlight #1 Toyota

Overview

The Alabama F.A.M.E. Advanced Manufacturing Technician Program (AMT) includes a two-year technical Associate degree that combines cutting-edge curriculum that supports advanced manufacturing technology, paid working experience, along with learning highly sought after business principles and best practices of a world class manufacturer.

Best Practices

- Mentors provided to verify students are mastering required skills
- Curriculum flexibility to allow focus on meeting industry needs
- Toyota defining the classes that best meet their needs
- Hold students accountable with attendance requirements and academic expectations

- Direct work experience while learning company culture
- Earning money to pay for education
- Employment after graduation
- Building of comradery and teamwork
- Interaction with industry professionals enhancing job relevance and public speaking skills

Mary Scott Hunter

Representative - Alabama Board of Education District 8

- Alabama graduation rates have improved from 2011 to 2014 with a goal 90%
- Reaching the 90% goal equates to a significant positive economic impact on the state
- The Honesty Gap between state testing and the NAEP is a major disconnect and catalyst for change
- Demographics
 - The Hispanic population is the fastest growing ethnicity in the Region 2 workforce
 - The age group from 40 to 54 is leaving Region 2 Why?
 - There is a high number of underemployed workers in Region 2, driving a need to attract higher skilled jobs to the region
 - Opportunities exist to transition declining skilled jobs into new industry with little to no training

Mary Scott Hunter

Representative - Alabama Board of Education District 8

- Industry Projection
 - Strong demand in Region 2 for middle-skilled jobs (beyond high school but no 4 year degree)
 - Demand will be growing in the future
 - Significant number of students in 2 and 4 year colleges with undeclared or general studies majors
 - Identified large gaps between future jobs and the number of students declared in a corresponding major
 - How do we get the message to help guide students to the right education and career?
- Understanding Challenges
 - Poverty in Alabama is a contributor to the education gaps
 - Large number of college students with debt
 - Skill gap index identifies deficiencies in student capabilities
 - Reading Comprehension
 - Active Listening
 - Critical Thinking
 - Active Learning
 - Graduates can do the job but have to be lead step by step due to these deficiencies

Mary Scott Hunter

Representative - Alabama Board of Education District 8

Solutions

- K-12
 - Strategic plan 2020 increase quality and quantity of our graduates
 - Promote Career and Technical Education (CTE), Industry Credentials, Leaderships, Career Awareness
 - Steer students to make smart decision about college and career
 - Collaboration between business and industry education
- 2 year colleges
 - Dual enrollment, apprenticeships, internships
 - Promote CTE ... same as above
- 4 year colleges
 - Hands-on opportunities
 - Internships
 - Change student interest/promote available job opportunities
 - Deal with skyrocketing costs
- What training solutions
 - Ready to work Alabama Community College System (ACCS)
 - Workforce Skills (Soft skills /Alabama Industrial Development Training (AIDT))
 - Manufacturing Fundamentals (AIDT)
 - AIDT Pre-employment training
 - Adult education (ACCS)

Best Practices Spotlight #2

The North Alabama Advance Manufacturing Technology Education Collaborative (NAMTEC)

Overview

 Drake State is collaborating with its manufacturing industry partners to produce multiskilled manufacturing technicians for employment in North Alabama industries.

Best Practices

- Recognized increase in demand for internships, co-ops, apprenticeships, and job shadowing
- Leveraged a changing manufacturing environment, which was upgrading technologies and demanding a hire skilled workforce
- Flexibility in the education, allowing students to choose what they were interested in as long as it fit within the curriculum
- Combined existing programs with emerging needs

- Enables pursuing 4 year degree if desired
- Enables students to try different skills to find the best fit
- Curriculum that will transfer as advance placement in 4 year colleges
- Providing degrees and certifications in advanced manufacturing with options, stackable certifications, and industry certifications

Lucia Cape

Senior Vice President Economic Development

- 22,000 new jobs 2010-2014 in North Alabama
- New Advanced Manufacturing Jobs in Cullman, Dekalb, Jackson, Limestone, Madison,
 Marshall, and Morgan Counties
- Increased number of announced jobs in manufacturing in North Alabama (between 2008 and 2015 it has grown from 20% to 50%)
- Alabama has become an automotive state with Huntsville being in close proximity to Automotive Original Equipment Manufacturers (OEMs)
- Alabama is also in close proximity to Aviation OEMs
- Huntsville's educated workforce exceeds the national average, population is growing at a rate that surpasses state and national averages, and has been recognized by various publications for growth and job opportunities
- Manufacturing labor is a significant portion of the overall labor force; 14% in Huntsville versus 10% nationwide
- Abundance of occupations in the region that can easily transition to meet specific aerospace
 & Adv. Manufacturing skill sets
- Huntsville is on a trajectory to surpass the 10k to 12k projected jobs over the next 10 years,
 but needs a workforce that can support the growth

Best Practices Spotlight #3 Huntsville Cyber Curriculum

Overview

Huntsville City Schools have been recognized for its cyber program by being selected as a CyberPatriot Center of Excellence by the Air Force Association. The district is one of only seven school systems in the nation to be honored. Two cyber teams from the district, Grissom High and New Century High, earned a spot in the national finals earlier this year, with the Grissom team winning first place in the country. The Grissom coach, Mrs. Christine Sutton, has been selected as the National CyberPatriot Coach of the Year.

Best Practices

- Collaboration with the community
- Connecting students with industry professionals
- Community guided program
- National level competition brings out the best in students
- Students are elevated as individuals within their school, recognized for achievements

- Students develop skills needed for the workforce
- Students realize opportunities beyond a 4 year degree
- Huntsville is recognized as a center for cyber education excellence
- Every student in the CyberPatriot Program received a full scholarship
- Provides relevance to the students as well as relevance to industry

Best Practices Spotlight #4

Innovative System Project for the Increased Recruitment of Emerging STEM Students InSPIRESS

Overview

The Innovative System Project for the Increased Recruitment of Emerging STEM Students (InSPIRESS) is an outreach project that provides the opportunity for high school students to develop and design a scientific payload to be accommodated on a spacecraft which is designed by undergraduate students in the UAHuntsville IPT project. High school students collaborate with the undergraduate engineering students to understand the engineering requirements, the design process, and the role a customer plays in design. InSPIRESS teams compete for selection by the undergraduate engineering teams.

Best Practices

- Engage local community
- Extremely relevant to STEM careers
- Leverages the students to inspire younger students to pursue STEM careers
- Great support from industry
- Puts physics into action

- Number of students interested in STEM careers has increased
- Self-efficacy higher in STEM
- Transforming the classroom
- Reached over 30,000 people in 2014
- Learned skills such as PowerPoint, teamwork, research, technical, writing, marketing, and communications
- Students see the relevance of their efforts to the real world

Best Practices Spotlight #5 Career Coach Playbook

Overview

- Career Coach assists students and parents in making educated and informed career decisions
- Cultivates an understanding of the process to achieve their career goals
- Encourages and advises students as they pursue the process for college and career readiness

Best Practices

- Guest speakers present specific information regarding careers and relevant topics from industry's perspective
- Job shadowing to experience true day-to-day realities of a chosen profession outside the classroom and away from peers
- Industry tours providing direct exposure to professions and industry
- Career events expose students to business and professional opportunities
- Individual advising provides one-on-one attention

- Educated and informed career decisions
- Improved understanding of careers available in a field
- Setting realistic goals and achievable plans
- Support and encouragement as students take the steps for college and career readiness