The Power of Resiliency: From a Statistic to a Success

Dr. Annette Parker, President South Central College





South Central COLLEGE



How it all started



When one door closes ... another opens



A News Article from 1984 About the End of the Olds Diesel

👁 2234 Views 🗩 7 Replies 💄 6 Participants 🕓 Last post by ClassicTVMan1981X, Apr 8, 2014

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NEWS

GM Cruises to End of Era Last Oldsmobile Cutlass Rolls Out of Plant

Jon Denton Published 12:00 a.m. CT July 3, 1999



My Introduction to Community College Employment

- Tutor (Drafting and CAD)
- Lab Technician
- Part-time Faculty
- Full-time Faculty
- Corporate Trainer
- Administration
 - M-TEC Building and Curriculum
 - AMTEC Co-PI



Dr. Annette Parker 2015 Lansing Community College Distinguished Alumnae

Off to Kentucky – Unbridled Spirit

AMTEC (the Automotive Manufacturing Technical Education Collaborative) is a multi-state, multi-college, multi-company sector partnership that is working to align its industry-based, modularized curriculum with the National Association of Manufacturers-endorsed Manufacturing Skills Certification System. The collaborative began as a customized training project of Toyota and the Kentucky Community and Technical College System and grew into an automotive sector partnership that includes other American, Asian, and German auto manufacturers. Today the AMTEC partnership includes 32 community colleges as well as labor organizations across 13 states.





Ignite. Educate. Accelerate.

AMTEC is supported by a National Science Foundation Grant

autoworkforce.org

How AMTEC Approached the Core Element of Quality

- **1.** Job Task Analysis (Job Profiling) Identified initial knowledge, skills and ability competencies for multi-skilled maintenance workers in the modern automotive manufacturing production process.
- 2. Setting Industry Standards and Establishing the Specific Competencies to be Taught Using Delphi prioritization process that followed DACUM.
- **3. Curriculum Development** curriculum to include skills and tasks common to all industry partners and focus on skills and tasks required not on how they are organized in a given workplace.
- **4. Competency-based Assessment** identified gaps that current workers may have in their knowledge and skills.
- 5. Credential Development of credentials for Electrical, Mechanical, and Multi-Skilled Technicians
- 6. Instructional Design and Delivery Delivery with three components: small online learning modules, contextual learning environment; and flexibility)
- Continuous Improvement While this is a priority, continuous improvement process have not yet been implemented since the curriculum was rolled out in 2012.

Who...Me?



A New Opportunity



President Obama Advanced Manufacturing Partnership 2.0

President Obama's Advanced Manufacturing Partnership (AMP) Steering Committee 2.0. SCC President Dr. Annette Parker a member of committee.

5 work groups within the AMP initiative:

Transformative Technologies National Network for Manufacturing Innovation (NNMI)

Scale-up Policy

Image of Manufacturing

Demand-driven Workforce Solutions



Playbook to Building an Apprenticeship Program

Mi Institute

Employer's Playbook for Building an Apprenticeship Program



Advanced Manufacturing Partnership 2.0 - Work Creek 3



Workforce Planning Building the Business Case Public/Private Partnerships Program Design Branding and Marketing Selection of Program Participants Monitoring Program Performance Transition out of Apprenticeship Program Evaluation



Minnesota Advanced Manufacturing Partnership

Mission:

Help close the "skills gap" in Minnesota by implementing a restructured academic framework in advanced manufacturing that emphasizes a statewide standardized core curriculum which will lead to stackable, portable academic career pathways and industry recognized credentials while simultaneously working in industry.





National Academies of Science, Engineering, and Medicine

- Building America's Skilled Technical Workforce
- National Advisory Board for Undergraduate STEM Education
 - Systemic Change in Undergraduate STEM Education
- Key Findings
 - Finding 4: The evidence suggests that as a nation, the United States is not adequately developing and sustaining a workforce with the skills needed to compete in the 21st century.9
 - Finding 6: The nation is experiencing, and will continue to experience, imbalances in the supply of and demand for skilled technical workers in certain occupations, industry sectors, and location.



National Academies of Science, Engineering, and Medicine

- United States is guided and supported by a complex and often uncoordinated set of policies and funds at the local, state, and federal government levels associated with achieving goals related to economic development, education, labor and employment, health and human services, and veterans' affairs. Most resources are allocated by formulas based on demographic factors, which serve as a proxy for need, rather than on performance, outcomes, or evidence of what works best in workforce development.
- National Academies of Sciences, Engineering, and Medicine. 2017. Building America's Skilled Technical Workforce. Washington, DC: The National Academies Press. https://doi.org/10.17226/23472.



The Work of the Future: Building Better Jobs in an Age of Intelligent Machines

- Innovation improves the quantity, quality, and variety of work that a worker can accomplish in a given time.
- Rising productivity improves living standards and provides society with the resources to invest in those whose livelihoods are disrupted by the changing structure of work.
- Where innovation fails to drive opportunity, it generates fear of the future (Winners and Losers).
- (This fear exacts a high price: political and regional divisions, distrust of institutions, and mistrust of innovation itself.



So What is Really Happening?

- Demographic shifts burden the nation as the ratio of retirees to workers.
- Over the next two decades industrialized countries will have more job openings than workers to fill them, spurring increased robotics and automation to close skills gaps.
- Three distinct mechanisms through which automation changes human work:
 - Substitution
 - Complementarity
 - New task creation





The Skills of the Future: Attaining Excellence in Education, Training, and Ongoing Learning

- Automation will disproportionately burden workers without a four-year college degree.
- Community colleges, apprenticeship programs, sectoral training programs, and online education offerings are likely to be most relevant and accessible to impacted workers.
- As we see reduced employment in middle-skill production, operative, technical, and administrative positions, there will be replacement hiring from retirement of baby-boomers.
- Aging of Baby Boomers will expand the healthcare sector:
 - Respiratory Therapist
 - Dental Hygienist
 - Clinical Laboratory Technician
- Recent fears about AI leading to mass unemployment are unlikely to be realized. Instead, like all previous labor-saving technologies—AI will enable new industries to emerge, creating more new jobs than are lost to the technology.

Leadership that Supports the Role of Community Colleges

- Nurture partnerships with employers to design skill programs that are directly responsive to market demands.
- Create work-based learning programs that are valuable for skills development.
- Expand online education, a potentially transformative technology for expanding access to higher education, because it lowers the cost of delivery and removes capacity constraints for adult learners.
- Develop programs that support career-long adult learning for workers to gain new skills and retain good jobs.
- Schedule offerings that allow people to move in and out of the system at different points in life or change their course of study to pursue new career paths.
- Offer four-year degrees rather than just two-year degrees, or work closely with four-year institutions to offer courses and credit that can smooth the transition for transfer students.
- Connect with K-12 to provide college credits before students graduate from high school.
- Explore a plethora of new bootcamps, badges, and other models for conferring nondegree credentials.

National Institute of Standards and Technology Manufacturing Extension Partnership

Three Critical Challenges Facing American Manufacuring

Over the past years, most recently because of the COVID-19 pandemic, three significant challenges for American manufacturing have emerged:

- 1. A national manufacturing **workforce** crisis that is and will deter economic prosperity;
- **2. Supply chain** issues that leave the country, its economy, its security, and its citizens vulnerable; and
- **3. Technology**-related deficiencies and constraints that threaten national security and impact and escalate the other two challenges.

Each of these challenges is complex in its own right, and they become more so as they impact and interact with one another. They are, in fact, overlapping and connected issues as the graphic to the right indicates.



National Institute of Standards and Technology Manufacturing Extension Partnership

Mission:

Strengthen and empower U.S. manufacturers

Strategic Priorities 2023-2027

Narrow the Workforce Gap

Mitigate Supply Chain Vulnerabilities

Leverage Technology



Intersections Across Strategic Goals

- Narrowing the workforce gap through engagement in future technologies
 - Building a pipeline for the future by exposing the younger generation to the advanced technologies manufacturers will soon deploy
- Increasing technology adoption across served customers
 - Easing pathway to advanced technology adoption by providing manufacturers access to a workforce that is already in those advanced technologies
- Strengthen workforce knowledge of supply chain dependencies to help predict supply chain risks
 - Create a resilient workforce that understands new technologies and uses them to increase supply chain resiliency through prediction of supply chain risks

Service on Regional & National Organizations

Community College Presidents'

Initiative CCPI– STEM

- Community Colleges, given our history and who we serve, are primed to fill the growing needs in the skilled technical workforce.
- Only 22% of eligible public community colleges are taking advantage of the NSF ATE funding.
- (CCPI-STEM) intends to galvanize and support community college to prepare ATE proposals and to implement and sustain ATE projects through a Leadership Team, National Advisory Board, and **Regional Networks**
- ccpi-stem.org



Coalition for Career Development (CCD)

- Industry-led nonpartisan coalition committed to making career readiness the first priority of American education
- Dedicated to transforming career development through priorities including education reform, research initiatives, stakeholder engagement, and more.
- The CCD Center believes in providing ALL learners with high-quality career development services and technologies that will help secure productive employment in their chosen careers as efficiently and costeffectively as possible.
- CCD-Center.org



Coalition for **Career Development**

Service on Regional & National Organizations

Center for Occupational Research & Development (CORD)

- Textual teaching and learning in the STEM disciplines
- Less transitions from secondary to postsecondary education and careers
- Training solutions to help America's technicians excel in the global labor market.
- Cord.org



Council for Adult and Experiential Learning (CAEL)

- CAEL was founded to help organizations succeed by providing expertise, resources, and solutions that effectively support adult learners as they navigate on- and off-ramps between education and employment.
- Through partnerships with entities across the adult learner ecosystem, they help create actionable career pathways along the journey of lifelong learning and meaningful work.
- Cael.org



Other Service in Local, Regional & National Organizations

Iowa-Minnesota Campus Compact (IAMNCC) 2014 – Present

ACE Labs 2021-Present

ACTE Mentors 2021-Present

National Academies of Science, Engineering, and Medicine – Roundtable on Systemic Change in Undergraduate STEM Education 2017-2022

President's Round Table (PRT) 2018-2020

Massachusetts Institute of Technology Work of the Future Advisory Board 2018-2020

HLC Differential Accreditation Advisory Committee 2021-2022

Center on Education & Labor at New America, New Models of Career Preparation 2021

Commission on Public Relations Advocacy and Advancement (AACC) 2021-2023

Greater Mankato Growth 2016-Present

Greater Mankato United Way 2022-Present

Faribault Chamber of Commerce 2014-2019



"No one is making you do anything you don't want. I'm just saying we're all headed for Dodge City and we think you should come along."

Change Leadership Check List

✓ Build Your Team & Credibility

- ✓ The right team is crucial
- ✓ Passionate, confident, drive
- ✓ Awareness of self and others
- ✓ Alignment of culture and strategies
- Working as a team, not just as a collection of individuals

✓ Gain Buy-In

- ✓ Open communication builds trust
- \checkmark Coherence is critical to build trust
- ✓ Trust does not happen overnight
- ✓ Not everyone is an early adopter
- ✓ Message must be Inspirational
- ✓ Direction

✓ Keep Moving Forward

- ✓ Change does not happen overnight
- Check in on your team regularly and support them
- ✓ Own the change don't let it own you change is difficult



Working with Detractors

- Ask questions to understand; not convince
- Decide who is essential
- Develop individual plans for each
- Remember
 - Emotional Intelligence
 - How others see it
- Invest your time
- Do not ignore attacks
- Digital wisdom



Declaring Victory Before the War Is Over

- Often with initial success, leaders lose sight of the overall objective
- Forget the difficulty and time it takes to make change
- Don't settle for too little too soon
- Don't lose sight of the work that's left to be done

"It's one of the greatest gifts you can give yourself, to forgive. Forgive everybody" - Maya Angelou

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel" - Maya Angelou

Thank you! Questions?



