

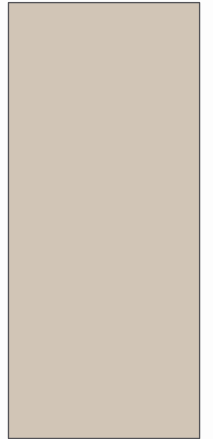


PATHWAYS TO PROSPERITY: SOUTHERN STATES' EFFORTS TO PREPARE A 21ST CENTURY WORKFORCE



ALABAMA WORKFORCE DEVELOPMENT

STATE REPRESENTATIVE
MAC BUTTRAM (R-CULLMAN)



ALABAMA'S ECONOMIC DEVELOPMENT SUCCESS

- Ranked as one of the top five states in the nation in which to do business for each of the past four years.
 - #1 in competitive labor costs
 - #3 in labor climate
 - #4 in workforce development efforts
- Successful economic development efforts have led to the creation of **over 40,000 new jobs** and the recruitment and expansion of major companies and industries.



GE Aviation



CHANGING THE DYNAMIC

- Companies relocating to Alabama attribute a large part of their decision making to our robust workforce development efforts.
- Alabama's success in these efforts is thanks to changing the dynamic on who has input into workforce training decisions.
- *Accelerate Alabama* (our strategic plan for economic development) identified a major gap in the alignment between the offerings of our Career Technical Education (CTE) programs in our public schools and the needs of existing industry.
- Education interests used to dictate training priorities with absolutely no input from industry.
- Business is the number one consumer of the products of our school system, they have to be a part of the discussion.

21ST CENTURY WORKFORCE ACT

OVERVIEW

- Allows the Alabama Public School and College Authority to issue up to \$50 million in bonds so that local school boards can purchase equipment for CTE programs in order to bring those programs up to industry standards.
- School systems must use an industry developed equipment list to ensure the updates ensured a students' experience truly matched that of business and industry.

21ST CENTURY WORKFORCE ACT

HOW IT WORKS

- The bond proceeds can be distributed in three ways:
 - \$10 million to each school system, pro rata, based on the number of CTE programs in existence in the 2012-2013 school year.
 - \$20 million to each school system, pro rata, based on the number of students who were enrolled in CTE during the 2012-2013 school year.
 - \$20 million to the 21st Century Workforce Fund which are allocated by the 21st Century Workforce Grant Committee and will be distributed only to reimburse CTE programs for expenses related to purchasing equipment necessary to meet industry standards.

ALABAMA FUTURE WORKFORCE INITIATIVE

OVERVIEW

- Creates a \$10 million scholarship program for students to participate in CTE dual enrollment programs.
- The program is open to 10th, 11th, or 12th grade high school students with an overall 3.0 GPA or a 2.5 GPA in technical programs.

HOW IT WORKS

- Individuals and businesses that donate to the scholarship will receive a state income tax credit of up to 50% of their total contribution.
- Up to 80% of any contribution can be directed by the donor to a specific CTE dual enrollment program or course at any two-year institution.
- This ensures that an employer can help fund the training for specific skilled workers they need to hire locally.

ALABAMA FUTURE WORKFORCE INITIATIVE

- Only 2,100 students out of an eligible 31,000 were participating in dual enrollment programs prior to the program.
- The Alabama Future Workforce Initiative will provide 9,500 additional students dual enrollment opportunities.
- Dual enrollment will also aid our continuing efforts to lower Alabama's high school dropout rate and help develop our students' potential.

CONCLUSION

- In 2014, the legislature also prioritized an additional \$5M in our education budget to fund dual enrollment programs. That means in the past two years, **we've committed \$65 million to fund career tech and workforce development advancements in the state.**
- Investing in workforce development is the key to our continued success in economic development.
- QUESTIONS?

21st Century Workforce Development in Tennessee: Partnership between State, Education, and Industry Leaders

Southern Legislative Conference
July 10, 2014

Toyota Across the United States

INDIANA



SIENNA since 1997
(in IN since 2003)



SEQUOIA since 2000



HIGHLANDER since 2009
(Highlander Hybrid in IN since 2013)



CAMRY since 2007

KENTUCKY



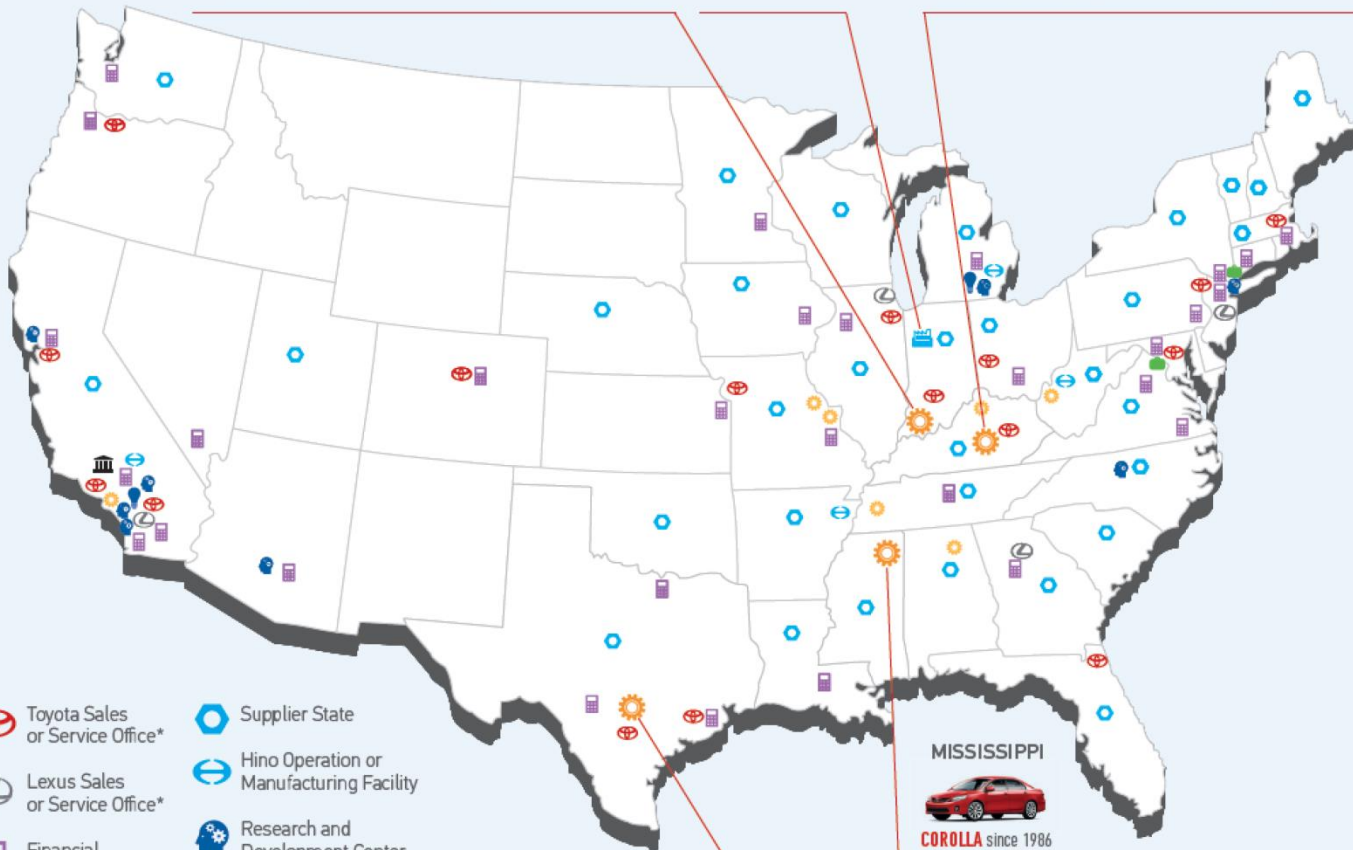
CAMRY since 1988
(Camry Hybrid in KY since 2006)



AVALON since 1994
(Avalon Hybrid in KY since 2012)



VENZA since 2008



MISSISSIPPI



COROLLA since 1986
(in MS since 2011)

TEXAS



TACOMA since 1991
(in TX since 2010)



TUNDRA since 1998
(in TX since 2006)

- Toyota Sales or Service Office*
- Lexus Sales or Service Office*
- Financial Services Office*
- Manufacturing Facility†
- Contracted Manufacturer
- Supplier State
- Hino Operation or Manufacturing Facility
- Research and Development Center
- Design Center
- Holding Company
- Toyota Museum

365,000 Jobs CREATED IN THE U.S.¹

\$1 Million SPENT EVERY HOUR ON R&D²

\$27.5 Billion PARTS AND MATERIALS PURCHASED³

9 Models BUILT IN THE U.S. AND EXPORTED TO 23 COUNTRIES⁴

Nearly \$700 Million PHILANTHROPIC CONTRIBUTIONS⁵

14 Hybrids AVAILABLE IN THE U.S.⁶

1,500 Dealers TOYOTA, SCION, AND LEXUS

2,082,504 VEHICLES SOLD

10 Plants IN THE U.S.

1,257,028 VEHICLES PRODUCED⁷

2,000 New Jobs CREATED AT OUR MISSISSIPPI PLANT

\$19.5 Billion DIRECT INVESTMENT IN THE U.S.

56 Years OPERATING IN THE U.S.



Toyota's Bodine Aluminum Tennessee



- Established in 2003
- 310 Team Members
- \$268 mil. Investment
- Annual capacity – over 2 million parts
- 3 shift rotation (8 hr. 5 day)
- 450,000 sq. ft. manufacturing facility
- 4-cylinder, V6, V8 & AT Case production

Bodine Jackson Products



4 cyl.
Engine
Block

CAMRY



COROLLA



HIGHLANDER



MATRIX



VENZA



V6
Engine
Block

AVALON



CAMRY



HIGHLANDER



SIENNA



VENZA



V8
Engine
Block

SEQUOIA



TUNDRA



Auto.
Trans.
Case

AVALON



CAMRY



LEXUS RX 350



SIENNA



VENZA



Toyota Suppliers in Tennessee

- Total annual spending with TN suppliers: \$2.8 billion
 - Jobs dedicated to Toyota business: 5,400+
 - Number of Suppliers: 50

Key Suppliers

Supplier	Commodity	City
MAHLE Engine Components USA, Inc.	Pistons	Morristown
Denso Manufacturing Tennessee, Inc.	Alternator, Starter	Maryville
Akebono Brake Clarksville	Rotor/Drum	Clarksville
TRW Fuji Valve, Inc.	Engine Valves	Sevierville
JTEKT Automotive Tennessee - Vonore	Power Steering Components	Vonore
UGN, Inc.	Dash and Hood Insulators, Silencers & Butyl	Jackson

Manufacturing in Tennessee



- Total Manufacturing Output:
\$41.4 billion (2012)
- Share of Gross State Product:
14.9% (2012)
- Manufacturing Establishments:
6,322 (2012)
- Manufacturing Employment:
319,000 (2013)

Problems for Manufacturing

The Skilled Resource Pipeline

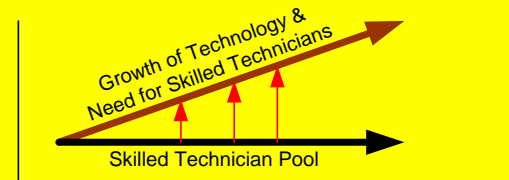
There are not enough sufficiently skilled workers in the U.S. hiring pool (NAM Study)

700,000

Unfilled skilled positions in the U.S.

**The No. 1
unfilled job openings
during the Great Recession?
Skilled Technicians**

Skilled Labor Gap

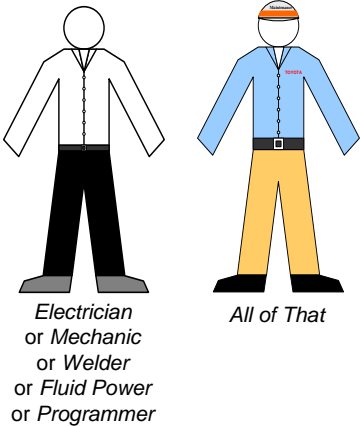
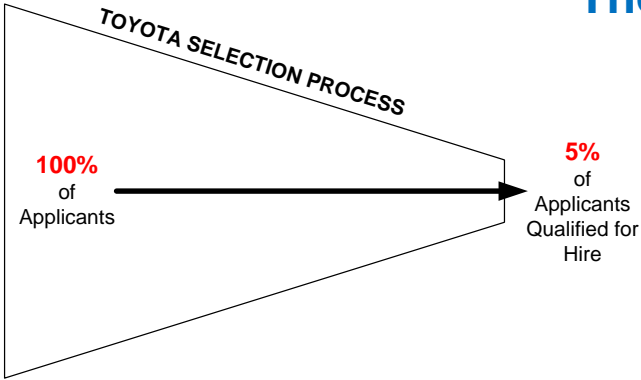


Problems for Manufacturing

THE SKILL RESOURCE PIPELINE QUALITY

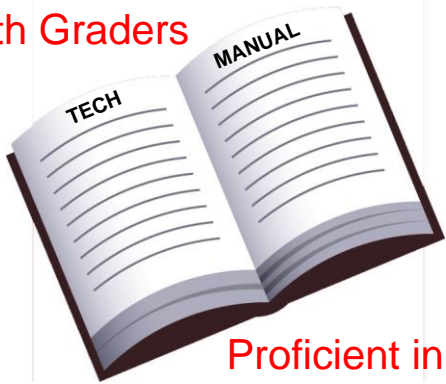
Those in the pool are insufficiently skilled

Most are Single Skilled
The need is multiskilled



Many have basic education deficiencies

35% of 12th Graders



Proficient in Reading

Problems for Manufacturing

THE SKILL RESOURCE PIPELINE QUALITY

Most Community Colleges and Trade Schools do not provide fully prepared graduates

Community College & Tech Schools

Complete courses → get degree - ✓

Attendance building/reporting - X

Safety culture - X

Workplace org. knowledge & skills - X

Lean manufacturing concepts - X

Problem Solving - X

Problems for Manufacturing

THE MANUFACTURING PERCEPTION PROBLEM

Manufacturing as a preferred career has declined

False perception that manufacturing is an unrewarding job



“It’s hard to get good people.”

“It’s hard to get good people, and even harder to keep them.”

State of Tennessee Assistance

- **DRIVE to 55**
 - Increase the percentage of Tennesseans with college degrees or certifications to 55% by the year 2025
- **Labor Education Alignment Program (LEAP)**
 - Align graduates with industry needs
 - Enables occupational training to count toward college credit
 - Does not punish students who receive compensation in co-op programs from receiving state educational aid
- **Tennessee Promise**
 - Beginning in Fall 2015, provide TN HS students last dollar scholarships to attend Community College or TCAT
- **Equipment and Program Grants**
 - \$10 million in state funds to invest in new equipment and programs that will help fill demonstrated workforce skills gaps

Education Partnering

- Identify community college and tech school partners
 - JSCC very open to new way of teaching and training
- Recognize that the workforce is like any other input; if we constantly received bad quality from a supplier we would assist the supplier with their quality issues; Why not the schools which supply us our skilled workforce input?

Industry Partnering

- Industry must work together to help solve the problem
- Recognize the need to increase the size of the overall “workforce pie” vs. just your own piece
 - No more stealing talent from each other
- Participate in “Marketing” manufacturing to schools, teachers, students, and parents
 - School tours, Classroom Presentations, etc.
- Look for more ways to partner in workforce development
 - Tool and Die skills



JSCC AMT Consortium



TOYOTA

BODINE ALUMINUM

TENNESSEE

ELEMENT¹³AL
HOLDINGS



TBDN TENNESSEE COMPANY



Mission

Products

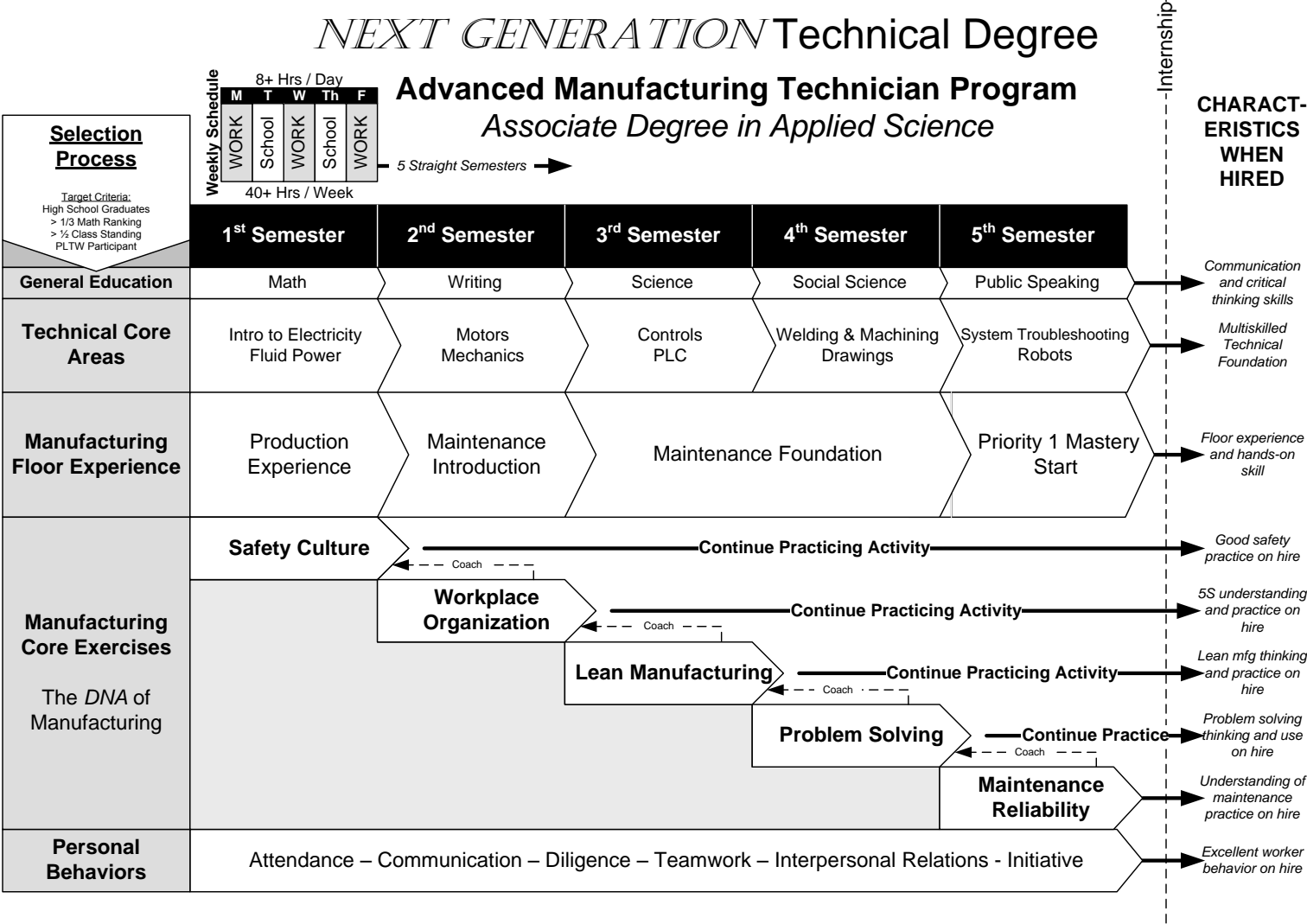
Processes

People

Facility

The Solution

Totally Redesign The Community College Program



The Solution

Totally Redesign the Learning Environment

The New Model School

For Manufacturing

Make the
Place of Learning
look and feel like
the *Place of Work*

JSCC recently
awarded \$440K
Governor's Grant to
assist in the
redesign

MORE REALISTIC
Looks Like a Factory
Feels Like a Factory

**MANUFACTURING
SIMULATOR**
Central Focus
Reason for Learning
Toyota Troubleshooting

**TOYOTA
LEARNING**
Safety, TPS, 5S
Learning Lab



**ORGANIZED BY
FUNDAMENTAL SKILL**
Electricity / Fluid Power
Mechanics & Fabrication

PROCESS LEARNING
Students learn in a
structure sequence

Students Learn
the *Right Way*
the *First Time*

The Solution

Make Every Development Minute Count

1 - Week				
M	Tu	W	Th	F
WORK	SCHOOL	SCHOOL	WORK	WORK
Program Work (1-2 hrs)				
HOMEWORK & STUDY				

40+ Hours Per Week
5 Straight Semesters

Work Start (July 26, 2010)	1st Fall Semester	Holiday Break	1st Spring Semester	Semester Break	1st Summer Semester	Semester Break	2nd Fall Semester	Holiday Break	2nd Spring Semester	GRADUATION
	16 weeks		16 weeks		8 weeks		16 weeks		16 weeks	



Final Product

NEXT GENERATION **Skilled Team Member**

Totally Multiskilled

Electrical / Fluid Power / Mechanics / Fabricator

Strong Math Capability

Upper 1/3 Nationally

Strong Reading Capability

Minimum 12th Grade Equivalent

Fast Technical Learner

Can learn, apply, improve, learn again quickly

Uses & Learns with Digital Media

Digital media is the preferred method

Strong Problem Solver

Can fully explain problem solving and methods

Effective Verbal & Written Communicator

Group & 1-on-1, develops high quality written material

Effective Interpersonal Skills

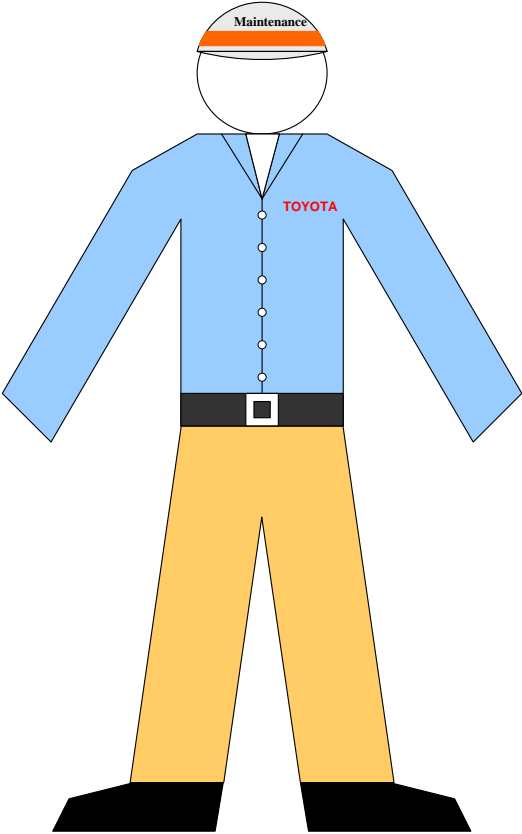
A conflict resolver

Natural Team worker

Prefers working as part of a team

Qualified for the Next Level

Has Associate Degree / All required company training complete



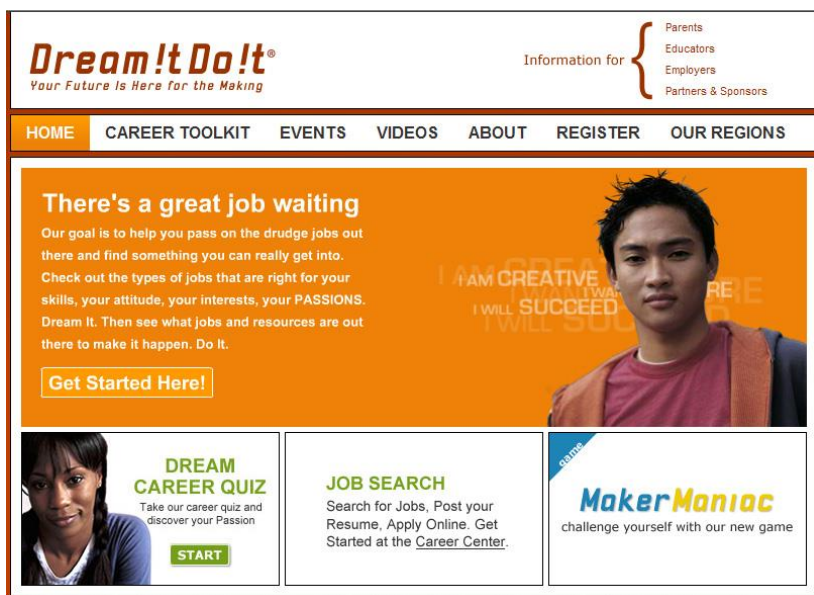
TARGET: 100% of Maintenance Force

The Solution

Work HARD to Change the Perception and Value of Manufacturing

Dream It! *Do It!*

Campaign to Encourage Careers in Manufacturing



Dream It! Do It!
Your Future Is Here for the Making

Information for { Parents, Educators, Employers, Partners & Sponsors }

HOME CAREER TOOLKIT EVENTS VIDEOS ABOUT REGISTER OUR REGIONS

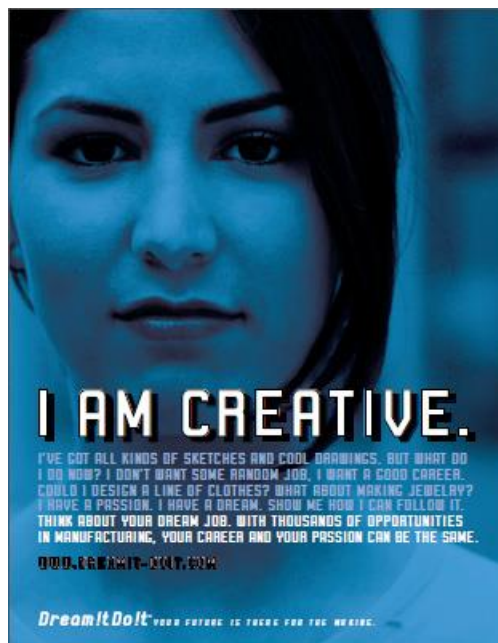
There's a great job waiting
Our goal is to help you pass on the drudge jobs out there and find something you can really get into. Check out the types of jobs that are right for your skills, your attitude, your interests, your PASSIONS. Dream It. Then see what jobs and resources are out there to make it happen. Do It.

[Get Started Here!](#)

DREAM CAREER QUIZ
Take our career quiz and discover your Passion
[START](#)

JOB SEARCH
Search for Jobs, Post your Resume, Apply Online. Get Started at the Career Center.

MakerManiac
challenge yourself with our new game

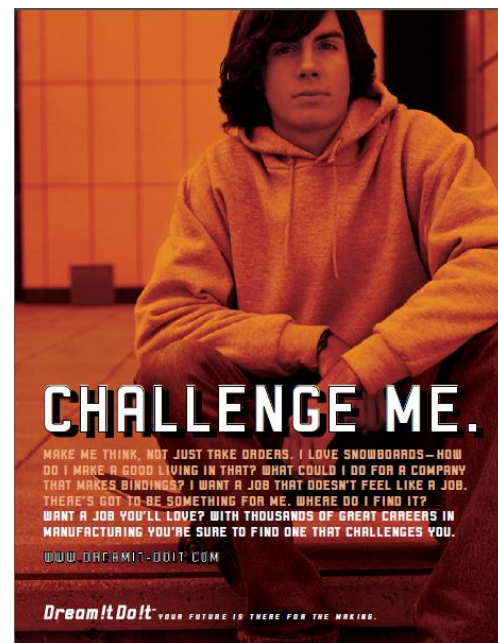


I AM CREATIVE.

I'VE GOT ALL KINDS OF SKETCHES AND COOL DRAWINGS. BUT WHAT DO I DO NOW? I DON'T WANT SOME RANDOM JOB, I WANT A GOOD CAREER. COULD I DESIGN A LINE OF CLOTHES? WHAT ABOUT MAKING JEWELRY? I HAVE A PASSION. I HAVE A DREAM. SHOW ME HOW I CAN FOLLOW IT. THINK ABOUT YOUR DREAM JOB. WITH THOUSANDS OF OPPORTUNITIES IN MANUFACTURING, YOUR CAREER AND YOUR PASSION CAN BE THE SAME.

WWW.DREAMIT-DOIT.COM

Dream It! Do It! YOUR FUTURE IS THERE FOR THE MAKING.

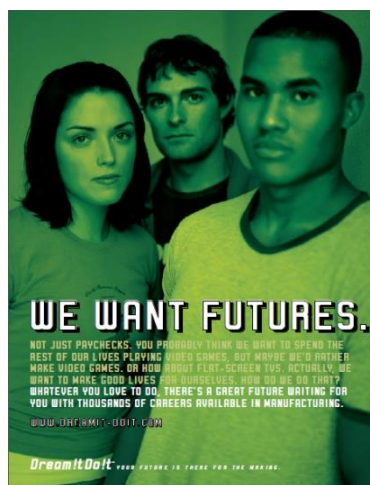


CHALLENGE ME.

MAKE ME THINK, NOT JUST TAKE ORDERS. I LOVE SNOWBOARDS—HOW DO I MAKE A GOOD LIVING IN THAT? WHAT COULD I DO FOR A COMPANY THAT MAKES BINDINGS? I WANT A JOB THAT DOESN'T FEEL LIKE A JOB. THERE'S GOT TO BE SOMETHING FOR ME. WHERE DO I FIND IT? WANT A JOB YOU'LL LOVE? WITH THOUSANDS OF GREAT CAREERS IN MANUFACTURING YOU'RE SURE TO FIND ONE THAT CHALLENGES YOU.

WWW.DREAMIT-DOIT.COM

Dream It! Do It! YOUR FUTURE IS THERE FOR THE MAKING.



WE WANT FUTURES.

NOT JUST PAYCHECKS. YOU PROBABLY THINK WE WANT TO SPEND THE REST OF OUR LIVES PLAYING VIDEO GAMES, BUT MAYBE WE'D RATHER MAKE VIDEO GAMES. OR HOW ABOUT FLAT-SCREEN TV'S. ACTUALLY, WE WANT TO MAKE GOOD LIVES FOR OURSELVES. HOW DO WE DO THAT? WHATEVER YOU LOVE TO DO, THERE'S A GREAT FUTURE WAITING FOR YOU WITH THOUSANDS OF CAREERS AVAILABLE IN MANUFACTURING.

WWW.DREAMIT-DOIT.COM

Dream It! Do It! YOUR FUTURE IS THERE FOR THE MAKING.

Dream It! *Do It!* TN

Campaign begins October
2014

The Benefits

- High quality, good paying jobs
 - Avg. Annual Manufacturing Compensation: \$65,241 (2012)
 - Manufacturing Pay Premium: \$26,556 (2012)
 - Plant Top Five Skilled Wage Earners (2012)
 - \$78,645
 - \$79,459
 - \$81,224
 - \$96,726
 - \$99,500
- High valued skill = Employment Security
- Increased pool of educated citizens
 - Improves community economic viability
 - Improves overall quality of life

Jackson/Madison County Solutions

- **DONE:** Partnership between local industry and Jackson State Community College to improve curriculum
- **DONE:** Industry Consortium working together to provide co-op experiences for JSCC students
- **DONE:** State government providing legislation and grant monies to make it financially possible
- **DONE:** State & Local marketing initiative to promote the value of manufacturing as a career
- **NEEDED:** Local education leaders to help supply the pipeline with engaged, energetic, and qualified students

Future Education Partnering

- Current High School CTE programs do not have the students with the academic credentials for the new technology
- Must drill down the pipeline to push more STEM education in middle and high school



QUESTIONS?

Spartanburg Community College Technical Scholars Program

Jay Coffey, Department Chair, Advanced Manufacturing
Technologies

Jennifer Little, Director, Career Services

What is the Technical Scholars Program?

- ▶ Partnership between Spartanburg Community College and local employers
- ▶ Students are enrolled in an Associates Degree program full time and work for the employer part-time
- ▶ Employer provides tuition assistance for the student
- ▶ Program began in 1982
 - ▶ Michelin was one of the original companies to hire scholars
 - ▶ BMW started with 6 scholars from SCC three years ago and now has 32 SCC students in their scholar program.

Participating Companies

- ▶ BMW - 32 students
- ▶ Michelin - 6 students
- ▶ Circor - 3 students
- ▶ Erhardt + Leimer - 2 students
- ▶ Schaeffler Group - 1 student
- ▶ WSPA - 1 student
- ▶ A Berger - 1 student
- ▶ SealedAir - Hiring their first three students this Fall



Student Requirements

- ▶ Each company identifies specific qualifications, but general requirements are:
 - ▶ High School Diploma or GED
 - ▶ At least 18 years old
 - ▶ Enrolled full time in an appropriate Associate Degree program
 - ▶ Have and maintain a 2.5 GPA (or higher if designated by company)

“In the BMW scholars program I get to take what I learn at SCC and put it to work at the areas top manufacturing company. BMW and SCC have created a great program putting education first and creating endless opportunities for the future. I am very proud to be a part of this program.”

- Dale Phillips BMW Scholar

Hiring Process

- ▶ Employer announces opportunity
- ▶ SCC Career Services office collects Technical Scholars Applications and verifies eligibility according to company/program requirements
 - ▶ BMW - Students apply to BMW Scholar opportunity through BMW website
 - ▶ Michelin - Students take math and mechanical aptitude tests on campus (SCC coordinates a pre-test math review session)
- ▶ Employer selects students to interview on-campus or on-site
- ▶ Employer hires Technical Scholars
- ▶ After student completes degree, companies have the opportunity to offer a full time position

Benefits to the Student

- ▶ Apply real-world skills and experiences to classroom instruction
- ▶ Work part-time and earn wages at one of the area's leading companies/healthcare facilities
- ▶ Receive support for educational expenses
- ▶ Considered for full-time employment

“Being a BMW Scholar has helped me gain hands-on experiences in the industry that could take years to grasp.”

- *Chee Kue,*

BMW Scholar



Benefits to the Sponsoring Company

- ▶ Simultaneous on the job training and academic coursework allow employers to “grow their own” workforce.
- ▶ Cost-effective recruitment and training of potential career employees
- ▶ Access to motivated students who possess a wide range of skills
- ▶ On-site evaluation of candidates for permanent employment
- ▶ An opportunity to participate in and influence the educational process



Benefits to the College:

- ▶ Increases community support
- ▶ Keeps education current with employer needs
- ▶ Assists with the placement of graduates
- ▶ Provides insight into the future direction of industry
- ▶ Supports the future demand for highly skilled technicians.



Scholar Success

- ▶ SCC graduated 16 Technical Scholars this May.
- ▶ BMW graduated their largest class of Scholars thus far this summer.
- ▶ 9 SCC Technical Scholars start as full time BMW employees by August 25.
- ▶ A Berger hired their first Technical Scholar this May.
- ▶ SealedAir is in the process of hiring their first three scholars.

SCC BMW Scholar
Graduates 2012



SCC BMW Scholar
Graduates 2014



Lessons learned along the way

- ▶ Constant communication with Industry to:
 - ▶ Review training needs
 - ▶ Changes in technology
 - ▶ Meet demand for skilled workforce
 - ▶ Establish lasting partnerships
- ▶ Facilitate student, industry and community growth

“Such a wonderful opportunity to help accelerate your career and learning experience! The Technical Scholars program has provided me with a valuable chance to have a successful life. A true "once in a lifetime" window of opportunity!”

- *Dustin Reid, BMW Scholar
and 2014 SCC Graduate*

Questions?

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