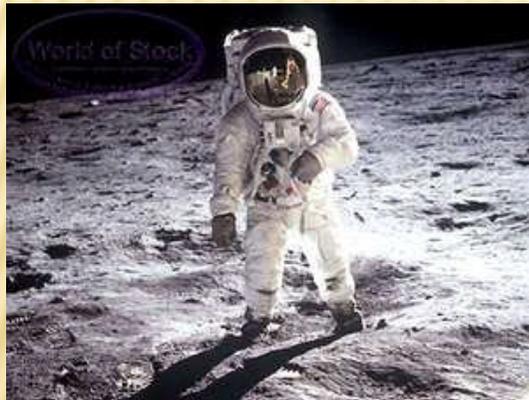
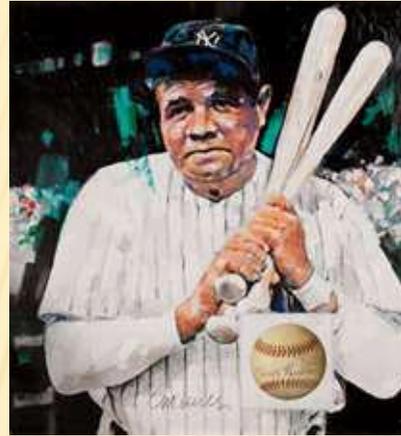


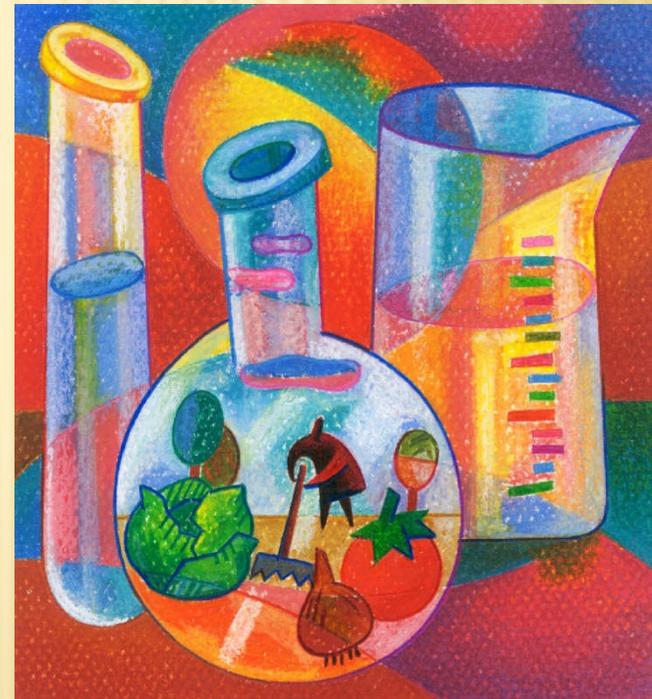
# WHATEVER HAPPENED TO VOCATIONAL EDUCATION?



“Shop Class” ??? ? !!!!!  
That’s so 20<sup>th</sup> Century!!

# 21<sup>ST</sup> CENTURY WORKFORCE REQUIRES HIGH SCHOOL REFORM

- ✘ Global economy
- ✘ Challenging & competitive labor market
- ✘ Shortage of skilled technical workforce (SKILLS GAP)
- ✘ Rapidly advancing & continuously changing technologies
- ✘ Demographics are changing
- ✘ Workplace requires critical-thinking, problem-solving, teaming, and ability to locate and research information



# Reasons Students Give for Dropping Out

Dropout Focus group and survey results of young people aged 16-25  
in 25 different locations throughout the US

- Classes not interesting 47%
- Not inspired or motivated to work hard 69%
- Failing 35%
- Required to repeat a grade 32%

(80% of students who fail 9<sup>th</sup> grade do not graduate from HS) (Black, 2004)

- Personal reasons 27%

The Silent Epidemic: Perspectives of High School Dropouts, March 2006

# **10 Things Everyone Should Know About:**

## **CAREER & TECHNICAL EDUCATION**

**KATHIE SCHMIDT  
DIRECTOR**

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**ST. LUCIE COUNTY SCHOOL DISTRICT**

# #1 CTE VS. VOCATIONAL EDUCATION

## × Career & Technical

- + Career Academies connect rigorous academics with state-of-the-art technical courses
- + Career Pathways lead to Industry Clusters and post secondary education
- + High skill, High wage, High Tech, High demand
- + College credit / certifications
- + Internships / partnerships
- + Work Readiness Skills
- + It's for ALL Students!

## × Vocational Education

- + Single courses
- + Narrowly defined skills
- + Disconnected from academic courses / teachers
- + Students who don't plan to go to college

## # 2 CTE IS FOR THE CAREER & COLLEGE BOUND.....

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- ✘ In today's workplace, the need for continued education and training is a given
- ✘ CTE programs include a sequence of 3-4 courses taken in addition to core math, science, English and social studies and other related academics
- ✘ Organized around "CAREER ACADEMIES"
- ✘ Articulated credits/dual enrollment/ = **time & \$**

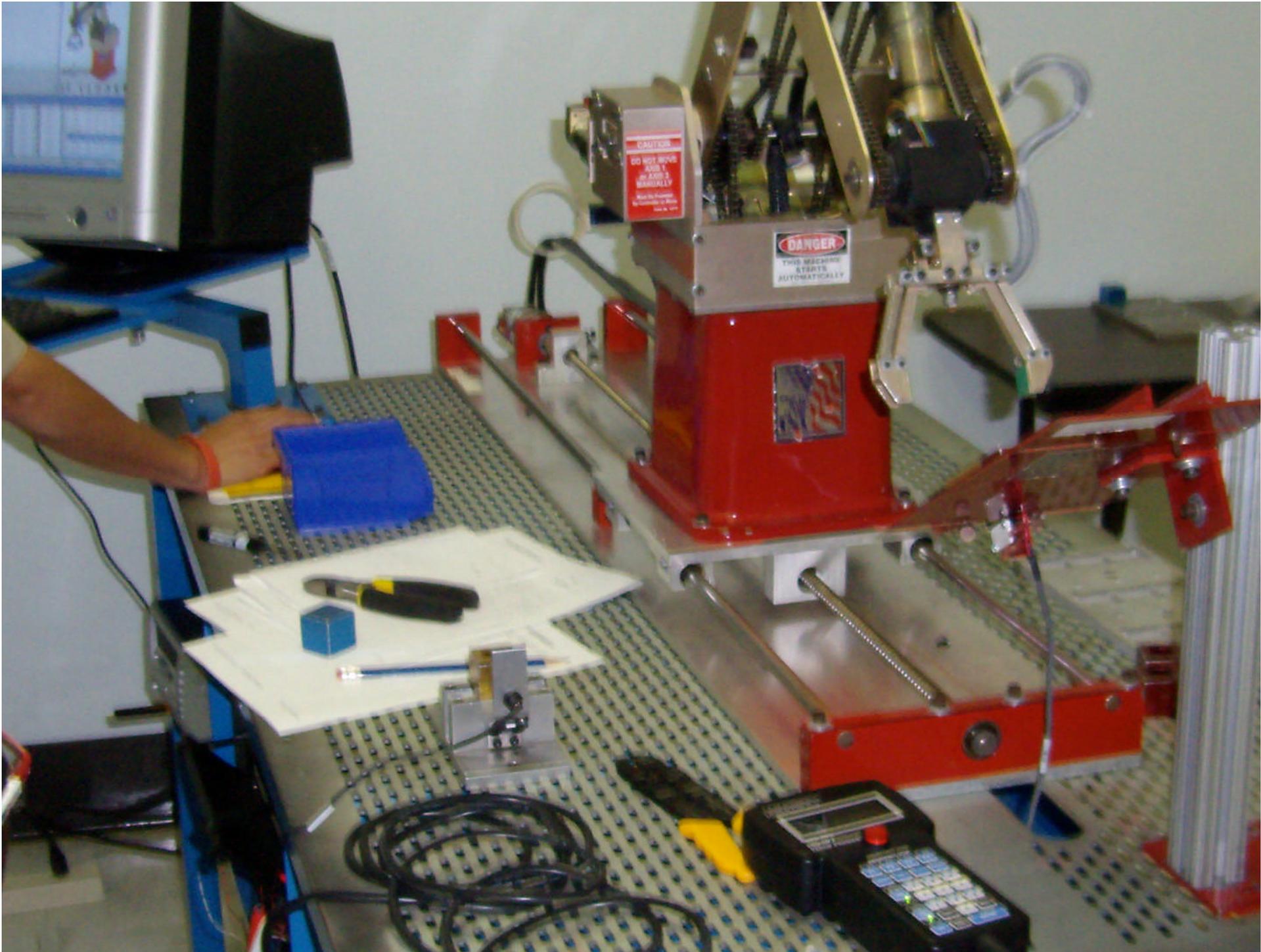
# # 3 CTE STUDENTS APPLY WHAT THEY LEARN IN ACADEMIC CLASSES INCREASING RETENTION, MOTIVATION & UNDERSTANDING



# MANUFACTURING /PRE-ENGINEERING

- + Curriculum includes robotics, pneumatics, hydraulics, welding, programmable logic controls, automated manufacturing
- + First HS testing center for National Manufacturers' Skills Standards Council's MSSC Production Technician certification
- + Students compete nationally in SkillsUSA in Robotics and Automated Manufacturing





# # 4 CTE STUDENTS EARN COLLEGE CREDITS AND EXPERIENCE THE RIGORS OF “COLLEGE-LEVEL” WORK

- × Embry Riddle Aeronautical University / Aerospace Academy
  - + Co-enrolled students on FPCHS Campus
  - + Earn college credits at world-class Aerospace university
- × St. Petersburg College / Veterinary Assisting Academy
  - + Articulated credits towards AS in Vet Tech
- × Keiser University
  - + Articulation agreements, Allied Health, Criminal justice, Digital Design, Culinary Arts, Web Design, Accounting and Marketing
- × Indian River State College
  - + 32 Articulation agreements (more to come)
  - + Collaborations through Research Coast Career Pathways Consortia on Programs of Study and career explorations
- × FAU / Harbor Branch Oceanographic
  - + Marine and Oceanographic Academy / MOA / FPWHS



## **# 5 CTE INSTRUCTORS ARE PROFESSIONALS TEACHING W/ UP-TO-DATE EQUIPMENT AND TECHNOLOGY**

- ✘ CTE teachers have documented years of industry experience and/or hold professional degrees:
  - + MAF Teacher of the Year
  - + Florida Restaurant Assoc "Teacher of the Year"
  - + Florida SkillsUSA Advisor of the Year
- ✘ Targeted federal funds (Carl Perkins), competitive grants, partnerships, and student performance fund technical labs, industry standard , & equipment.
- ✘ Teachers document industry background and are given PD for certification areas
- ✘ Technical Advisory Boards meet regularly to assist with curriculum, professional development, work-based learning, and ensure skillsets meet industry needs.



# **TECHNICAL ADVISORY COMMITTEES**

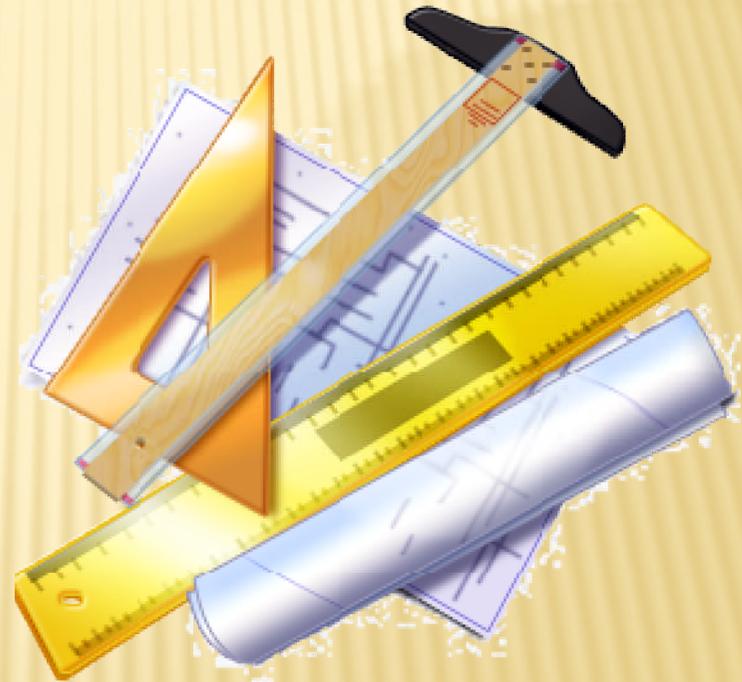
- × Aerospace and Aviation
- × Building Construction Technology
- × Automotive Technology / AYES
- × Manufacturing / Pre-Engineering
- × Allied Health
- × Culinary Arts
- × New Media Technology / TV Production
- × IT / Business / Web Design
- × Agriscience / Biotechnology
- × Veterinary Science
- × Criminal Justice / Public Service
- × Industrial Biotechnology

# # 6 IT MAKES ECONOMIC SENSE!!

- ✘ CTE students who complete 3 or more courses in a prescribed CTE program w/ 3.5 GPA & passing scores on the College Placement Test are eligible for Gold Seal Vocational Scholarship (a Bright Futures Scholarship)
- ✘ Through agreements with partnering post secondary institutions, articulated courses mean students begin college with “advanced standing” saving students tuition and time
- ✘ Industry certifications
  - + Marketable credentials for workforce entry
  - + Not just for students directly entering the workforce.....but for college bound

# STUDENT PERFORMANCE MEASURE

- ✘ Federal and state legislation now require increased focus on integration of rigorous academic content with industry specific curriculum aligned directly to priority workforce needs.
- ✘ Student achievement of industry certifications lead to performance funding.
- ✘ **Industry certifications are now calculated into HS grading formula**



# **“CAPE ACADEMIES”**

- × **Career and Professional Education Academies**
  - + Require 5-Year Strategic Plan w/ WFB / EDC / PS
  - + Must lead to careers in HS/HW/HD areas
  - + Must lead to a high level industry certification on a list approved by Workforce Florida / AWI / FLDOE.
  - + Requires partnerships with industry, workforce, post secondary, EDC, and community partners
  - + Certifications now part of high school grading
  - + Student certification + Graduation = Performance funding

# INDUSTRY CERTIFICATIONS

## × Students

- + Credibility and recognition of achievement
- + Improved quality & quantity of job opportunities in a highly competitive labor market
- + Increased earning potential
- + Increased portability of credits and entry into career pathways
- + “Work their way through college” or “college their way through work” at higher rate of pay = a financial strategy for college completion

## × Employers

- + Assurance of quality and work readiness
- + Predictable levels of performance in standardized skills
- + Reduced training costs

## × Community

- + Quality schools impact real estate, business and industry
- + Skilled workforce equals economic development

## Florida CAPE Students in 2009-10 Performed Better Than Their Peers; Certified CAPE Students Performed Even Better

Performance Indicator	Non-CAPE	CAPE, No Cert	CAPE + Certification
Average GPA	2.56	2.60	3.00
Chronically Absent	16.7%	19.7%	11.4%
At Least One Disciplinary Action	21.3%	20.8%	11.0%
Dropout Rate	2.2%	1.2%	0.2%
12 <sup>th</sup> Graders Earning Std. Diploma	78.6%	88.3%	97.4%
At Least One Accelerated Course	22.2%	22.0%	32.9%
Bright Futures Eligible Seniors	27.9%	25.9%	43.7%

# EXAMPLES.....



- ✘ 3 D Animation Academy / SLW Centennial
  - + Autodesk 3D Max
- ✘ TV Production / Video Prod Dev. = Apple Final Cut Pro
  - + SLWC / FPC / PSL
- ✘ New Media Technology / Treasure Coast HS
  - + Adobe Dreamweaver / Flash
- ✘ Industrial Biotechnology / Treasure Coast HS
- ✘ Carpentry / Construction Tech / Port St. Lucie HS
  - + 2<sup>nd</sup> House built on campus for sale again to another future “homeowner”.
  - + NCCER / UF .....Carpentry
- ✘ Health Academies .....FPC, FPW, PSL, SLWC, TC
  - + Certified Nursing Asst. / EKG/ CMAA/
- ✘ IT Computer Academy.....FPCHS
  - ✘ Computer programming / database fundamentals /Oracle
  - ✘ Microsoft Certifications / Word / Excel / PowerPoint

## **#7 PROGRAMS ARE DESIGNED FOR THE FUTURE.....**

- ✘ St. Lucie County business and industry partners collaborate with us to create programs of study that prepare students with the knowledge and skills required for current and future careers in today's global economy.

# COMMUNITY PARTNERSHIPS

- ✘ Workforce Solutions
  - + CAPE, Labor Market Information, Internships, Youth Council
- ✘ St. Lucie County Chamber of Commerce
  - + Education Committee, Academies in Action Bus Tours
- ✘ Economic Development Council
  - + Communicating critical relationships between quality schools and regional economic development
- ✘ Treasure Coast Builders Association
  - + Technical assistance and mentoring support for Building Construction Technology Academy / PSLHS
- ✘ Agricultural Community / IFAS / USDA
  - + Collaboration on revitalizing Agriscience Education
  - + Scientific research, modern Agribusiness practices, cutting edge technologies, stronger community partnerships
- ✘ Keiser University
  - + Articulation agreements, public relations, sponsorships, student competitions, field trips for Allied Health and Criminal Justice, uniforms, scholarships, career fairs, SAC, & art shows
- ✘ Indian River State College
  - + Articulation agreements, Research Coast Career Pathways Consortia, field trips for career academies, academy alignment
- ✘ FAU / Harbor Branch Oceanographic MOA
- ✘ Treasure Coast Research and Education Development Authority / TCERDA
  - + Extreme Alternative Energy Go-Kart Challenge
  - + "Tech Tours"

## **#8 INTERNSHIPS AND WORK-BASED LEARNING OPPORTUNITIES PROVIDE “REAL WORLD” EXPERIENCES**

- ✘ Workforce Solutions collaborates each summer using Federal WIA \$ for eligible youth
- ✘ St. Lucie County Schools Facilities Dept.
  - + Offers paid internships for students annually with funds earned through annual golf tournaments
- ✘ Grant funding for Manufacturing / Pre-Engineering students
- ✘ St. Lucie County Automotive Dealerships for students in our 3 high school Automotive Technology programs through the auto manufacturing industry and FADA's "AYES" Program



# **#9 LEADERSHIP, PERSONAL, AND WORK READINESS SKILLS ARE EXPANDED**

- ✘ Career and Technical Student Organizations / CTSO's build confidence, work attitudes, and communication as students demonstrate their skills and knowledge through regional, state and national competitions and community service programs.
- ✘ Emphasize total quality at work, high ethical standards, superior work skills, lifelong education, and pride in the dignity of work.
- ✘ Promote understanding of the free-enterprise system and involvement in community service.
- ✘ **SkillsUSA, HOSA, FFA, TSA, and FBLA**



# Robotics & Automation Technology

SA™  
IPS





**# 10 CAREER AND TECHNICAL  
EDUCATION OPPORTUNITIES ARE  
AVAILABLE ON ALL OF OUR HIGH  
SCHOOL CAMPUSES!**

**Thank you for this opportunity to share  
our story!**

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