WHATEVER HAPPENED TO VOCATIONAL EDUCATION?

“Shop Class” ???? !!!
That’s so 20th Century!!
21st 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 9th 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
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
CTE IS FOR THE CAREER & COLLEGE BOUND......

- 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
Curriculum includes robotics, pneumatics, hydraulics, welding, programmable logic controls, and 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**
- **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
CTE instructors are professionals teaching with 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
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*
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

学生的益处

- 誉及成就的认可
- 在竞争激烈的劳动力市场中改进了质量及就业机会的数量
- 增加的收入潜力
- 增加的学分可移植性，以及进入职业路径

- “工作他们的路去上大学”或“上大学他们的路去工作”在更高工资下的财务策略

雇主的益处

- 质量和工作准备的保证
- 标准化技能中的可预测的表现水平
- 减少培训成本

社区的益处

- 高质量的学校影响房地产、商业和产业
- 技能劳动力等于经济发展
Florida CAPE Students in 2009-10 Performed Better Than Their Peers; Certified CAPE Students Performed Even Better

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

- 3D 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
  + 2nd 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
# 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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