



Information Technology  
Science, Technology, Engineering & Mathematics  
(STEM) Career Cluster Update

Joint CTE Conference

October, 2010  
Cocoa Beach, FL

# IT Program Update



- Web Development Curriculum Overhaul
  - Courses in first of three programs defined
  - Industry certifications remain valid
  - Course re-leveling to expand during release of new programs
  - CIW currently represented on committee
  - Will launch as new program due to significant changes
- Information Technology
  - Industry driven committee formed
  - Representatives from Badcock, City of Winterhaven, Broward, Miami-Dade, Lee, FSCJ, & NAF
  - Program may take multi-track structure
- Digital Media Technology
  - Will be created from Multimedia Design Technology and New Media Technology programs
  - Expect launch 2011-2012
  - Review Committee Formed
- Business Intelligence Specialist AS/AAS degree program
  - Framework being finalized
  - Expect release in August 2010
  - May spawn business-oriented program
- IT Cyber Security
  - Just a heads-up at this time...Will like be elective of new IT program

# Organizational Update



- New CTE Programs Interim Director
  - Belinda Chason (Also AG Supervisor)
  - 850-245-9020/9017
- New CTE & Adult Ed Bureau Chief
  - Kathleen Taylor (Of Perkins Fame)
  - 850-245-9062

# STEM Program Update



- Scientific Visualization (SCIVIZ) Program
  - Extended version of North Carolina program
  - Four courses plus an internship
  - Introduction to IT required as core
  - Three courses set to Level 3
  - All submitted for PA consideration
  - Need industry certification for rendering/animation software
- PLTW Pathways to Engineering program
  - Standalone rigorous program
  - Contract required to be certified as a PLTW program
  - Students required to take online end-of-course assessments
  - Successful end-of-course assessments earn college credit
- STEM-CTL Engineering by Design (EbD)
  - Standalone rigorous program
  - Curriculum materials available at no cost
- Essential Skills integrated into curriculum frameworks

# CTE/Algebra 1 Alignment



- Only four STEM programs exceeded 50% SSS threshold
  - Aerospace Technologies I (53%)
  - Power & Energy Technology I (69%)
  - Engineering Technology I
  - Introduction to Engineering Design (PLTW)
- Summer Institute
  - 50 CTE and Math teachers attended
  - Collaborated on cross-integration of content & strategies
  - Extremely well-received
- Next Steps
  - Repeat CTE/Algebra 1 Summer Institute
  - Expand to include Geometry, Biology, and perhaps Algebra II

# New ListServ Channels



- Business Technology Education
  - Targeted for all BTE teachers
  - Contact either me or Wendy Sikora (wendy.sikora@fldoe.org)
- STEM Education
  - Targets all STEM & Technology Education teachers
  - Contact me
- PLTW
  - Targeted for all PLTW teachers
  - Will be augmented by PLTW State Leadership Team

# Target Certifications



- Microsoft MCAS Bundle is now MOS (Office Specialist)
  - Still bundled, but set to 3 of 5 versus 4 of 6 (Vista exam eliminated)
  - Requests received for individual exams as Perkins TSA
  - All exams must be complete prior to reporting
  - MICRO061 and MICRO069 bundles apply to Office 2007/2010
- Microsoft Office Expert exams coming
- CompTIA Strata and CertiPort's IC3 – Stay tuned on these...
- Certified Internet Web (CIW) – New Structure
- Autodesk Certified User coming back
- Engineering Core Certification

# School Grades & Certifications



- Industry certifications figure in school grade calculations
- Participation Factor
  - Number of students participating compared to total students
  - Weighted credit based on number of exams students take
  - Example: A student who takes 3 certification exams would be weighted as 1.2 in the calculation.
- Performance Factor
  - Number of successful outcomes compared to number of students
  - Weighted credit based on number of exams passed
  - Example: A student who passes 3 certification exams would be weighted as 1.2 in the calculation.
- Gold Standard Articulation with 6 or more credits also increments weight
- Certification exam must be on CAPE Funding List at the time taken
- No requirement for student to be enrolled in CAPE academy
- Questions on school grade implications should be referred to Tara Goodman at 850-245-9002 or [tara.goodman@fldoe.org](mailto:tara.goodman@fldoe.org)



# Professional Development



- Professional Development Institute (PDI)
  - Started late FY 2007
  - Funded by Perkins
  - Mini-grants apply to more than MS and Adobe certs
- Mini-grants for full-time CTE teachers to achieve training/certification on DOE-approved industry certifications.
- Online training for many IT areas (Space limited)
- Managed by the College of Central Florida
- <http://www.cf.edu/departments/instruction/workforce/perkins/>

# Contact Information



Duane Hume  
State Supervisor  
IT/STEM Education  
325 W. Gaines St., Suite 701  
Tallahassee, FL 32399  
PH: 850-245-9003  
Fax: 850-245-9019  
[duane.hume@fldoe.org](mailto:duane.hume@fldoe.org)