



2010 VPSC June Summer Summit

“What’s New in Tallahassee”
State and Federal Initiatives
Division of Career and Adult Education
Florida Department of Education
June 17, 2010



Education in Florida

- 67 Number of Counties/School Districts
- 3990—Total schools
 - 1953 – Elementary Schools (08-09)
 - 601 – Middle/Junior High Schools
 - 870 – Senior High Schools
 - 387 – Combination Schools
 - 179 – Adult Schools



Education in Florida

- 44 School District Technical Centers
- 28 Locally-Governed Public Colleges
- 11 Public Universities

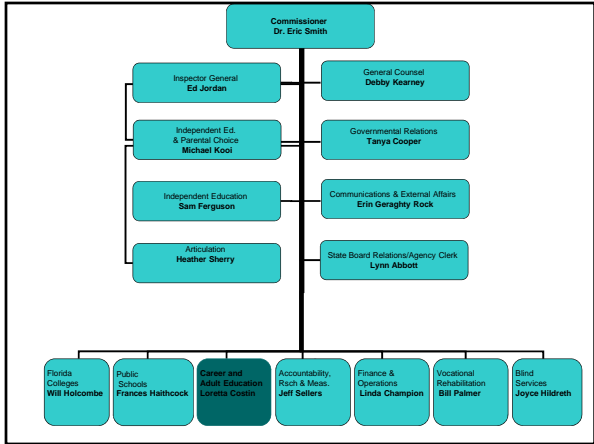
- 2.6 million + students
- 318,000+ full-time staff
- 180,000 + teachers

District Program Enrollments 2008-09

| SECONDARY | Enrollments |
|---|----------------|
| Unduplicated statewide enrollment in job preparatory secondary CTE programs | 340,347 |
| POSTSECONDARY | Enrollments |
| Career Certificate | 53,793 |
| Applied Technology Diploma | 1,555 |
| Apprenticeship | 10,715 |
| Literacy Diploma Programs | 289,694 |
| Continuing Workforce Education | 40,212 |
| TOTAL SERVED POSTSECONDARY STUDENTS | 395,969 |

College Enrollments 2008-09

| PROGRAM | ENROLLMENTS |
|---|----------------|
| Career Certificate/Apprenticeship | 29,626 |
| College Credit Certificate/Applied Technology Diploma (CCC/ATD) | 13,583 |
| Associate in Science/Applied Science (AS/AAS) | 66,712 |
| Literacy Diploma Programs | 82,360 |
| Continuing Workforce Education | 180,378 |
| TOTAL STUDENTS SERVED | 372,659 |






New Direction for Career and Technical Education (CTE)

| "Then" Vocational Education | "Now" CTE |
|---|---|
| For a Few Students (non college bound) | For all Students |
| For a Few "Jobs" (those requiring less than an associate's degree) | For all "Careers" (requiring technical degrees, baccalaureate degrees, professional degrees) |
| 6 to 7 "Program Areas" | 17 Clusters – 81 Pathways |
| In Lieu of Academics | Aligns/Supports Academics (integral partner in high school reform efforts) |
| High School Focused | High School and transition to postsecondary (certificate, 2-year, 4-year plus) |


The New CTE

| Then/Now | Future |
|--|---|
| Technical skills in isolation Teachers focus on technical content | Technical preparation supported by rigorous academics and employability skills |
| Preparation for a job | Career preparation for lifelong mobility and advancement starting broad in secondary education |
| "It's okay for your kid but not my kid" | Dual preparation for college and career. Going to school with purpose is important for all students |
| Compliance driven, program focused, instruction centered | Performance driven, Industry focused, based on identified essential knowledge and skills Student centered |



New Opportunity


As career and technical education evolves, so does the opportunity for CTE to be part of school redesign and improvement



Research Shows it WORKS!

- Students at schools with...rigorous CE programs have higher achievement in reading, math and science.
(Southern Regional Education Board)

- CE concentrators take more and higher level math than their general track counterparts.
(2002 National Center for Research in Career and Technical Education)



Florida's New Direction for CTE

Intensive Investment in CTE Program Design

- Developed rigorous programs aligned to NGSSS academic standards and industry specific technical standards
- Curriculum designed in consultation with University faculty groups, state and national industry leaders and K-12 leadership
- Secondary curriculum designed to be seamless/articulated to the postsecondary level (Programs of Study)
- Focused on academic integration – CTE programs designed to provide the context for the content in Math, Science, English

Carl D Perkins Career and Technical Education Act of 2006

- o Major Themes in the law include:
 - An integrated academic and career and technical education performance accountability system that requires continuous student and program improvement
 - Stronger academic and technical integration
 - Connections between secondary and postsecondary education systems
 - Close association with business and industry

Perkins Leadership Initiatives- Technical Skill Attainment

- o 3 Inventories – Secondary, Postsecondary Level, Postsecondary Adult Level posted at
http://www.fldoe.org/workforce/perkins/perkins_resources.asp
- o Inventories contain only “Gold Standard” evaluation instruments as defined in Florida’s Five-Year State Plan
- o Secondary inventory will contain all industry certifications on the approved CAPE Funding List

Perkins Leadership Initiatives- Technical Skill Attainment

The following *Gold Standard* assessments will be acceptable in any case throughout the plan period:

- o federal or state regulatory agency-developed assessment instrument leading to licensure (FAA, Dept. of Health, DBPR)
- o industry-developed assessment instrument leading to industry certification (ASE, HVAC Excellence)
- o industry-developed end of program assessments (NA3SA)
- o proprietary company-developed assessment instrument leading to certification of proficiency in one or more company product (Microsoft, CISCO)
- o third-party-developed assessment instrument (NOCTI, ASK Institute, Brainbench)

Perkins Leadership Initiatives- Programs of Study

Goal for Florida's CTE Students:

All CTE programs will be offered via a local program of study with a local articulation agreement by 2013

- Over 300 local programs of study
- Strong career pathways consortia network guided by local business and industry
- Over 6,000 local articulation agreements facilitating seamless transfer from secondary to postsecondary
- Statewide articulation agreements efforts focused on industry certification to AS/AAS degree level

| Career Cluster: Education & Training | | CTE Program: Early Childhood Education | | | | | | |
|--|-----------------------------|--|--|---------------------------|--|---|---|--|
| Career Cluster Pathway: Teaching/Training | | 16 CORE CURRICULUM CREDITS | | | | 8 ADDITIONAL CREDITS | | |
| | | ENGLISH | MATH | SCIENCE | SOCIAL STUDIES | OTHER REQUIRED COURSES | CAREER AND TECHNICAL EDUCATION COURSES | |
| | | 4 credits | 4 credits | 3 credits, 2 with lab | 3 credits | PEL 1011(40), PEL 1012(40), PEEL 1013(40) | RECOMMENDED: EARLY CHILDHOOD EDUCATION with four semesters before Admission | |
| Career Cluster of interest identified by students enrolled in mandatory middle school career education course that includes interest inventory through Choices and ePersonal (Education Planner through FACTS.org). | | | | | | | | |
| HIGH SCHOOL | 9 | English I | Algebra I | Bio/ Earth, Space Science | American History | | Early Childhood Education 1 | |
| | 10 | English I | Geometry | Biology | World History | | Early Childhood Education 2* | |
| | 11 | English II | Algebra II | Chemistry | American Government/ Economics | | Early Childhood Education 3 | |
| | 12 | English IV | Statistics | Physics | Knowledge of Society | | Early Childhood Education 4* | |
| Dual enrollment courses may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements, see the Articulation Coordinating Committee's Dual Enrollment Equivalency List and Bright Futures Comprehensive Course List. | | | | | | | | |
| Secondary career and technical education programs may lead to industry recognized certificates, occupational opportunities or postsecondary education options. Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available: | | | | | | | | |
| POSTSECONDARY | TECHNICAL CENTER PROGRAM(S) | | COMMUNITY COLLEGE PROGRAM(S) | | | UNIVERSITY PROGRAM(S) | | |
| | Early Childhood Educator* | | Child Development/Early Intervention (Community College Certificate) | | | Child Development (B.S. Degree) | | |
| | Childcare Center Operators | | Early Childhood Education (A.S. Degree) | | | Early Childhood Education (B.S. Degree) | | |
| School Age Certification Training | | Early Childhood Management (A.S. Degree) | | | School Counseling & Guidance (M.S. Degree) | | | |
| SAMPLE CAREER SPECIALTIES | | | | | | | | |
| Preschool/Pre-Kindergarten Teacher | | Preschool/Pre-Kindergarten Teacher | | | Teacher - Elementary Education | | | |
| Childcare Center Director | | Childcare Center Director | | | Adoption Services Specialist | | | |
| School Age Care Coordinator | | | | | School Psychologist, Guidance | | | |
| Relevant Industry Certifications (Options): | | | | | | | | |
| Secondary: | | (1) Instructional Childcare Training | | | (2) Child Development Associate Equivalency (CDAE) | | | |
| Postsecondary: | | (1) Director Credential | | | (2) Staff Credential | | | |

Gold Standard Pathways Project

- Working with the state and community colleges on articulation agreements associated with students earning industry certifications.
- 60 agreements approved by the State Board of Education. (Another 25 presented to SBE)
 - approved by the Articulation Coordinating Committee
 - approved by the Occupational Education Standing Committee and the members of the Council on Instructional Affairs
 - Developing POS based on these articulation agreements
 - http://www.fldoe.org/workforce/dwdfame/artic_frame.asp

CAPE – Career and Professional Education Act (F.S.1003.491)

A research-based program that integrates a rigorous academic curriculum with an industry specific curriculum aligned directly to priority workforce needs established by the regional workforce board.

- Must lead to one of the 155 industry certifications on the approved CAPE funding list
- Earns additional FTE (.3 more than AP) for the District
- Part of the new High School Grading System
- Many are articulated to the statewide state – earn “bonus” points
- <http://www.fldoe.org/workforce/fcpea/default.asp>

Industry Certifications

- Currently 155 on CAPE funding list
 - Currently 60 Industry Certification Articulation Agreements on the Gold Standard Career Pathways list (another 25 presented to the SBE)
 - Teacher Industry Certifications – Carl D. Perkins State Leadership/Professional Development Institute mini grants administered by Central Florida Community College
- <http://www.cf.edu/departments/instruction/workforce/perkins.htm>

CAPE Academies Growing in Florida High Schools

| Indicator | 2007-08 | 2008-09 |
|--|---------|---------|
| Academies Registered | 246 | 490 |
| Students Enrolled | 19,868 | 53,324 |
| Percentage of High School Population | 2.2% | 6.5% |
| Students Earning Industry Certifications | 803 | 1,855 |

CAPE Academy Curriculum

| Primary Career Cluster | Number of Academies |
|--|---------------------|
| Health Sciences | 94 |
| IT | 76 |
| Education & Training | 46 |
| Business Management and Administration | 43 |
| Hospitality & Tourism | 40 |
| Architecture & Construction | 39 |
| Transportation, Distribution & Logistics | 38 |
| Arts, A/V Technology & Communications | 34 |
| Agriculture, Food, and Natural Resources | 31 |
| Science, Technology, Engineering & Mathematics | 18 |
| Finance | 10 |
| Law, Public Safety & Security | 10 |
| Manufacturing | 8 |
| Human Services | 1 |
| Marketing Sales & Service | 1 |

Headcount by Grade level (2008-09)

| Grade Level | Academy Students | Percent | Non-Academy Students | Percent |
|-------------|------------------|---------|----------------------|---------|
| 9 | 11,848 | 22.2 | 226,736 | 27.8 |
| 10 | 15,733 | 29.5 | 214,430 | 26.3 |
| 11 | 13,480 | 25.3 | 190,923 | 23.4 |
| 12 | 12,263 | 23.0 | 182,206 | 22.4 |
| Total | 53,324 | 100.0 | 814,295 | 99.9 |

Student Performance

| Indicator | CAPE | Non-Cape |
|--|-------|----------|
| Average GPA | 2.62 | 2.53 |
| Chronically Absent | 12.3% | 15.5% |
| At Least One Disciplinary Action | 21.2% | 21.6% |
| Dropout Rate | 1.4% | 2.4% |
| 12th Graders Earning Standard Diploma | 78.1% | 66.5% |
| At Least One Accelerated Course | 19.0% | 17.7% |
| Bright Futures Eligible Graduates | 26.3% | 39.1% |
| 2007-08 Graduates Enrolling in Postsecondary | 59.6% | 67.2% |

Additional FTE in the FEFP

- Funding based on prior year actual data
 - 2008-09 performance data is used for 2009-10 FEFP
- Calculated by identifying students who meet the following criteria:
 - Earned an industry certification on the "Industry Certification Funding List" adopted by the State Board of Education each year
 - Enrolled in a registered career and professional academy
 - Earned a standard high school diploma

Additional FTE in the FEFP

- **2008-09 FEFP (Final)**
 - 144 FTE (480 students) in 23 districts
 - Estimated Value per Student: \$1,165
 - Estimated Total Funds in FEFP: \$ 551,000
- **2009-10 FEFP (3rd calculation)**
 - 341.40 FTE (1,138 students) in 36 districts
 - Estimated Value per Student: \$1,089
 - Estimated Total Funds in FEFP: \$ 1.23 million

General requirements for high school graduation; revised (F.S. 1003.428)

One credit in fine or performing arts, speech and debate, or a practical arts course that incorporates artistic content and techniques of creativity, interpretation, and imagination. Eligible practical arts courses shall be identified through the Course Code Directory

- Creates the Practical Arts/Fine Arts List
- Process to be considered for the list
- Currently 232 CTE courses on the list

○ <http://www.fldoe.org/articulation/CCD/files/pacourses.pdf>

Senate Bill 4—Implementation

- OPPAGA Studies
 - Types of Diplomas issued
 - +/- Aspects of merging workforce programs
- Middle School Students—Must be informed!
- Eliminated MAI/s **but not** 4-year plan--ePEP
- 9th Grade Cohorts—Math & Science
 - 2007 (Algebra I)
 - 2010 (Geometry)
 - 2011 (Biology I)
 - 2012 (Algebra II, Chemistry or Physics **and** one approved rigorous science course)
 - End of Course (EOC) Exams/Development

Diploma Designations (F.S.1003.4285)

Each standard high school diploma shall include, as applicable:

- **SB 4 Eliminated MAI Designation** (A designation of the **student's major area of interest** pursuant to the student's completion of credits as provided in s. [1003.428](#).)
- A designation reflecting completion of four or more accelerated college credit courses if the student is eligible for college credit pursuant to s. [1007.27](#) or s. [1007.271](#) in Advanced Placement, International Baccalaureate, Advanced International Certificate of Education, or dual enrollment courses. The Commissioner of Education shall establish guidelines for successful passage of examinations or coursework in each of the accelerated college credit options for purposes of this subsection.
- A designation reflecting the attainment of one or more **industry certifications** from the list approved by Workforce Florida, Inc., under s. [1003.492](#).
- A designation reflecting a **Florida Ready to Work Credential** in accordance with s. [1004.99](#).

Differentiated Accountability

Through DA, schools fall into a matrix of categories based on the level of the school's achievement.

- The lowest performing schools receive the most support, and under DA, these schools are required to implement the most robust interventions
- State broken into 5 regions – each region has a Regional Education Director (RED) and a DA team
- District CTE Director and State DOE CTE Staff part of the DA team
- Necessitated a definition of a Quality CTE program (Teacher, Curriculum, PD, Advisory Board, Work base Learning, Facility, CTSO – *available online*)
- Created a Plan of Action for each visited school
- <http://www.fldoe.org/workforce/dwdframe/pdf/ctepe.pdf>

Alternative Credit Pilot (F.S. 1002.375)

A pilot project that allows school districts to award alternative course credit for students enrolled in nationally or state-recognized industry certification programs, as defined by the Agency for Workforce Innovation in accordance with the criteria described in s. 1003.492(2).

- o Eligible alternative credit courses include Algebra 1a, Algebra 1b, Algebra 1, Geometry, and Biology.
- o Alternative credits shall be awarded for courses in which a student is not enrolled, but for which the student may earn academic credit with the passage of an end-of-course assessment.

Alignment Process

Federal Laws:

- o U.S. Federal legislation in the 1990s encouraged states and localities to “integrate” academic and vocational education
- o 2006 Carl D. Perkins Career and Technical Education Act (Perkins IV)

Florida Statutes:

- o 1003.413 Florida Secondary School Redesign Act
- o 1003.493 CAPE Act

Race to the Top/STEM:

- o MOU/Nonnegotiable
- o 50% alignment, EOC, industry certification

Makes Sense:

- o Curriculum that shows how academic knowledge and skills are used in the world of work may motivate more students to persevere in the academic courses that prepare them for college. Overlapping the content of academic and CTE courses has enables students to see applications of academic subject matter outside of school, which may increase students’ motivation, understanding, and retention of concepts.

Example

Course - Agriscience Foundations
 Standard: 3.0 Apply scientific and technological principles to agriscience issues--The student will be able to:

This standard supports the following Sunshine State Standards: **SC.912.E.7.8;** SC.912.L.14.2, 3, 4, 5, 6, 8; SC.912.L.15.14, 15; SC.912.L.16.1, 2, 3, 4, 7, 9, 10, 12, 14, 15, 16, 17; SC.912.N.1.1, 2, 3, 4, 6, 7; SC.912.N.2.2, 5; SC.912.N.3.1; SC.912.N.4.1; MA.912.S.3.1, 9; MA.912.S.4.2; MA.912.S.5.1, 3; MA.912.S.5.2, 3, 4, 5

Benchmarks:

- Employ scientific measurement skills.
- Demonstrate safe and effective use of common laboratory equipment.
- Identify the parts and functions of plant and animal cells.
- Describe the phases of cell reproduction.
- Implement the scientific method and science process skills through the design and completion of an agriscience research project.
- Interpret, analyze, and report data.
- Investigate DNA and genetics applications in agriscience including the theory of probability.
- Evaluate advances in biotechnology that impact agriculture (e.g. transgenic crops, biological controls, etc.).

Math and Science NGSSS

- **SC.912.L.14.1**
 - Science standards – 9th – 12th, Life Science,
 - Could also be Physical Science, Earth and Space, Nature of Science
- **MA.912.A.2.1**
 - Math standards – - 9th - 12th Algebra,
 - Could also be Calculus, Discrete Mathematics, Financial Literacy, Geometry, Probability, Statistics, Trigonometry
- <http://www.floridastandards.org/index.aspx>

"New" NGSSS Science Standards

- **Ag Foundations Standard: 3.0** Apply scientific and technological principles to agriscience issues
- **SC.912.E.7.8** The student understands the interconnectedness of the systems on Earth and the quality of life.

Aligned!

CTE Course Alignments to NGSSS Algebra/Biology/Geometry Standards

CTE/STEM Program EOC Alignment

Algebra (Professional development being planned for summer 2010)

- 8600620 Aerospace Engineering
- 8600080 Aerospace Technologies
- 8600630 Biotechnical Engineering
- 8600590 Civil Engineering/Architecture
- 8600560 Computer Integrated Manufacturing
- 8607000 Engineering Technology
- 8601300 Power & Energy Technology

Biology (Professional development planned for spring/summer 2011)

- 8106100 Animal Biotechnology *(program already awards 1 science credit)*
- 8113000 Environmental Resources *(program already awards 1 science credit)*
- 8736000 Industrial Biotechnology *(program already awards 1 science elective credit)*
- 8106500 Plant Biotechnology *(program already awards 1 science credit)*
- 8708100 Biomedical Engineering

Geometry (Professional development planned for spring/summer 2011)

- 8725400 Architectural Drafting
- 8720300 Building Construction Technology
- 8600800 Drafting/Illustrative Design Technology
- 8725000 Drafting Technology
- 8725200 Electrical Drafting
- 8725100 Electronic Drafting
- 8725300 Mechanical Drafting
- 8725500 Structural Drafting

Professional Development


- o **Professional Development**
- o The Division of Career and Adult Education supports professional development for secondary and postsecondary career and technical education teachers and administrators by providing opportunities for statewide mini-grants for industry certification and professional development training and activities. **Summer 2010 Opportunities for Teachers**
- o **Summer Institute – CTE-Algebra1** July 12-13, 2010
 - Aerospace Technologies 1, Engineering Technology 1, Power & Energy Technology 1, Introduction to Engineering Design
- o **Summer Institute - Quality CTE program** –August 2-3, 2010
- o **Application Form** (PDF, 25KB)
- o **Florida Association of Career and Technical Educators (FACTE)**
- o Professional Development Opportunities – Secondary – Coming Soon!
 - New Administrators Workshop—August 3, 2010
 - New Teachers Training—folded into Quality CTE Program August 2-3

Professional Development

- o **Professional Development Institute**
- o Professional Development Opportunities - Postsecondary
 - [Archive](#)
 - Please visit the [Professional Development Institute](#) for links to the latest information on workshops and training.
- o **Mini Grants for Industry Certification**
- o The Carl D. Perkins State Leadership/Professional Development Institute is offering mini-grants to Florida's secondary and post-secondary full-time Career and Technical Education teachers who wish to pursue **state-approved** industry certifications. College of Central Florida (CF) was selected to administer the Perkins grants to full-time CTE teachers throughout the state.
- o [Career and Adult Education -Perkins Professional Development Institute For Full-time CTE Faculty & Teachers - Updated Schedule!](#)
- o **Career and Technical Education Reading (CATER)**
- o [Facts about CATER, FDR-PD, and GAR-PD](#) (PDF, 104KB)
- o [Overview, Links and Resources](#)
- o **Summer CATER Memo March 2010** (PDF, 29KB)
 - [CATER Schedule - March 2010](#) (PDF, 10KB)
 - [CATER Q&A - March 2010](#) (PDF, 15KB)

Perkins Leadership Initiatives: Professional Development Opportunities

- o **Professional Development Institute (PDI)**
- o Mini grants to secondary and postsecondary CTE teachers who wish to review training and/or testing for state approved industry certifications.
<http://www.cf.edu/departments/instruction/workforce/perkins.htm>
- o Highlights from 2008-2009 include:
 - 500 CTE teachers earned industry certifications;
 - 69 new college administrators participated professional development
 - 63 college instructors participated in online professional development course



Future Directions...

- Florida Education Next Generation Strategic Plan (Big Rocks)
 - *Increase the number of CAPE Academies*
 - Next Generation Sunshine State Standards
 - Articulation – Gold Standard Pathways
- Race to the Top – MOU, Increase Stem programs (Aligned programs), Struggling Schools (\$10,000,000)
- Legislation - Graduation requirements, EOC's, Teacher evaluations



Questions? Contact

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