

## **2.0 PROGRAM ADMINISTRATION**

### **2.1 Term of Plan**

Pursuant to sections 4 and 122 of Perkins IV, Florida submitted a transition plan for July 1, 2007 through June 30, 2008 to fulfill the State's obligation under section 122 of the Act. The State Board of Education hereby submits this plan for the period July 1, 2008 through June 30, 2013. This plan has been developed in cooperation with career and technical education practitioners throughout the state.

### **2.2 Career and Technical Education Activities Designed to Meet or Exceed the State Adjusted Levels of Performance (Sec. 122(c)(1)(A)-(L))**

The Division of Workforce Education provides leadership and technical assistance in an ongoing effort to meet or exceed the State's adjusted levels of performance. These activities include the identification of high skill, high wage, or high demand occupations; the development of instructional programs; guidance strategies designed to increase student productivity; and professional development activities for teachers and faculty. Florida's goals towards building an effective career and technical education system are:

- Provide access to educational opportunities to meet the workforce and economic development needs of the state
- Ensure all programs include the highest level of industry standards
- Recruit, employ, and support qualified teachers, advisors, and administrators to promote student achievement
- Integrate career and technical education and rigorous academics
- Provide aligned Programs of Study from secondary to postsecondary which result in a career path for all students
- Create and maintain effective partnerships with secondary/postsecondary education and business and industry

Florida offers approximately 360 career and technical programs and courses that range from seventh grade through an Associate in Science Degree. Perkins funds are used to support programs for students in grades 7-14 in 67 school districts (including charter schools), 28 community colleges, Department of Juvenile Justice programs, Florida School for the Deaf and the Blind, Florida's University Developmental Research Schools, correctional facilities and other eligible recipients. These local educational agencies provide career and technical education programs in the following sixteen Career Clusters recognized by the State of Florida:

- Agriculture, Food, & Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communication
- Business Management & Administration
- Education & Training
- Finance
- Government & Public Administration
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology

- Law, Public Safety, & Security
- Manufacturing
- Marketing, Sales, & Service
- Science, Technology, Engineering & Mathematics (STEM)
- Transportation, Distribution, & Logistics

To enhance opportunities for students to contribute to their own self-sufficiency, Florida has implemented a career ladder approach to career and technical education programs with the development of Occupational Completion Points (OCPs) at both the secondary and postsecondary program levels. An Occupational Completion Point is a group of competencies/skills needed to obtain proficiency in a specific occupation as identified by Florida's Agency for Workforce Innovation and/or business and industry. OCPs provide opportunities for students to acquire entry-level employment competencies at less than full program completion. This enables a student to enter and exit a program without penalty or repetition of competencies. OCPs provide clearly defined career paths for students and facilitate articulation between secondary and postsecondary institutions.

Secondary career and technical education initiatives currently being implemented in Florida involve the continued development of curricula for high school students that are academically challenging and rooted in career preparation. Programs are designed and validated in cooperation with business and industry partners to ensure the curricula are academically challenging and technically relevant. The standards-based career and technical education programs are also aligned to the Sunshine State Standards, which provide specific student performance standards and benchmarks that outline what students should know and be able to do upon completion of each course, including academic expectations and technical skills. Expanded learning opportunities are available through participation in Career and Technical Student Organizations (CTSOs). These co-curricular organizations are essential components of all quality career and technical education programs and include comprehensive leadership training, local, state, and national competitive events, community service, and career planning.

Postsecondary career and technical education programs are also designed and validated in cooperation with business and industry partners to ensure the curricula are academically challenging and technically relevant. The postsecondary career and technical education credentials offered in Florida range from certificates (Postsecondary Adult Vocational Certificate programs) to degrees (A.A.S. and A.S. degree programs). Program offerings are aligned with industry needs through a statewide process that identifies targeted occupations meeting high skill, high wage, or high demand criteria.

**(a) Career and Technical Education Programs of Study**

Florida's ongoing statewide articulation initiatives provide a framework for implementing Programs of Study as required by the Act. By building on model Tech Prep Programs of Study, the Division of Workforce Education will collaborate with eligible recipients to implement Programs of Study that incorporate the required elements. Florida intends to develop statewide model Programs of Study that will serve as a foundation for statewide secondary to postsecondary articulation for each of the 16 Career Clusters.

**(b) Development and Implementation of Programs of Study**

Through alignment with the 16 Career Clusters, all students in Florida, including special populations, will have the opportunity to participate in a program of study that will facilitate seamless transition from high school to college and careers.

Through the local application process for both Basic Grant and Career Pathways Consortia funding, eligible recipients will be required to develop Programs of Study that are aligned with the Career Clusters. It is planned that statewide career pathways for all of Florida's high skill, high wage, or high demand career and technical education programs will be developed by 2012.

To assist eligible recipients in this process, Florida plans to develop a cohort-based professional development program that engages practitioners in structured seminars that provide the national, state and local perspectives on Career Cluster implementation and aligning Programs of Study with Career Clusters.

The Division of Workforce Education will require eligible recipients to submit their Programs of Study on the customized state-approved template (see Appendix B). The State has developed 57 sample Programs of Study for the Career Cluster pathways as a resource for eligible recipients. The templates include academic course recommendations that reflect the core courses required for graduation from a Florida public high school and the options for Industry Certification that may be obtained as a result of pursuing a particular Program of Study.

In addition, the templates address Florida's secondary reform initiative requiring students to complete four credits in a major area of interest during high school. Major areas of interest range in focus from advanced science courses to early childhood education. Major areas of interest provide opportunities for career and technical education dual enrollment.

The templates and samples are available on the Career Clusters of Florida web site at <http://www.fldoe.org/workforce/careerclusters/>.

Throughout the duration of the plan, the Division of Workforce Education plans to explore data collection initiatives to track students transitioning from secondary to postsecondary education; and to develop a web-based database/repository of Programs of Study as a reference tool for eligible recipients.

**(c) Development and Implementation of Articulation Agreements between Secondary Education and Postsecondary Education Institutions**

The Florida Board of Education has adopted a "Seamless Articulation and Maximum Access" goal as one of the goals of Florida's K-20 educational system. This seamless articulation model provides career ladder opportunities for students as they acquire college credit while still in high school. These credentials and/or credits may articulate to a technical center, a community college, or a four-year college or university.

The linkage between secondary and postsecondary education programs in Florida is accomplished with the implementation of several strategies to ensure seamless articulation. Acceleration options provide opportunities for secondary career and technical education students to participate in dual enrollment, early admission, advanced placement, credit by examination,

the International Baccalaureate Program, and articulated credit through local inter-institutional articulation agreements.

#### *Dual Enrollment*

Dual enrollment enables secondary students to earn elective credits towards a high school diploma while completing requirements for a postsecondary certificate or degree offered at technical centers or community colleges. Acceleration mechanisms shorten the time needed to complete postsecondary certificate or degree requirements, broaden the scope of available options after high school, and increase the depth of content available to students in a particular subject. The Division of Workforce Education will initiate a process to develop statewide secondary to postsecondary articulation agreements based on the statewide model Programs of Study.

#### *Inter-institutional Agreements*

Inter-institutional agreements between local high schools and technical centers or community colleges provide opportunities to receive postsecondary credit towards a certificate or degree for secondary coursework. Local articulation agreements have been encouraged and formalized between local institutions for many years and the number of agreements has increased as a result of the Tech Prep program. Due to the variation in credit awarded for equivalent programs across the state, Florida is moving beyond local articulation agreements and is developing statewide articulation agreements that will enhance and standardize the transfer of credit among delivery systems.

#### *Statewide Articulation Agreements*

Statewide articulation agreements facilitate student transfer to the next education level without unnecessary course or content duplication. There are specific statewide agreements that enable students to transfer from certificate to degree programs and from two to four year degree programs. In 1996, the Applied Technology Diploma (ATD) was established to provide students with the opportunity to pursue an education that leads directly to work or that may be transferred to a community college as part of an AS degree. Beginning with the 2000-2001 academic year, students awarded an Associate in Science degree at select community college programs were guaranteed admission to any state university with guaranteed articulated course credit towards a designated program. In 2005-2006, the Division of Workforce Education began involving postsecondary educators and administrators across the state in an articulation project to develop statewide articulation agreements for Postsecondary Adult Vocational Certificate (PSAV) to the Associate of Applied Science (AAS) and Associate of Science (AS) degrees. As a result of this initiative, there are now currently 37 PSAV programs that articulate to AAS or AS degrees. All statewide articulation agreements are found in the *Statewide Articulation Manual* which is updated annually by the Florida Department of Education and may be viewed at <http://www.fldoe.org/articulation/>.

#### *Guaranteed Transfer of Courses*

Another component of articulation is the requirement that all public postsecondary institutions participate in the Statewide Course Numbering System (S.C.N.S.). The S.C.N.S. is a database of postsecondary courses offered at Florida's public and voluntarily participating nonpublic institutions where equated courses are guaranteed automatic transfer of credit.

### *Articulation Coordinating Committee*

The Articulation Coordinating Committee (ACC) is a K-20 advisory body appointed by the Commissioner of Education. It is comprised of representatives from all levels of public and private education: the State University System, the Community College System, independent postsecondary institutions, public schools, nonpublic schools, and career and technical education. It is a forum for discussing and coordinating ways to help students move easily from institution to institution and from one level of education to the next. Primary responsibilities include approving common prerequisites across program areas, approving course and credit-by-exam equivalencies, overseeing implementation of statewide articulation agreements, and recommending articulation policy changes to the State Board of Education, the Board of Governors, and the Legislature.

- (d) **Secondary Level Career and Technical Programs of Study Offered by Eligible Recipients** Beginning in middle school, Florida's students begin to focus on possible career pathways and Programs of Study. Florida's school reform legislation, A++, states that students entering 6th grade in 2006-2007, must complete a one-semester course in career and education planning in the 7th or 8th grade to be promoted from middle school. Teachers, including career and technical education teachers, and counselors have been trained in the career development process and the tools and information they will use to assist students in their career decision making. The Career and Education Planning Course (CEPC) can be taught as a stand-alone or the competencies have been integrated into courses approved by the Department of Education. Twelve career and technical courses have been approved with the additional competencies being added to the existing courses. Course outcomes include students learning about Career Clusters and career and technical Programs of Study offered at the secondary and postsecondary level. The *Middle School Career and Education Educator's Toolkit*, was developed through the Division of Workforce Education, to be used by teachers of the course. The course includes lesson plans, PowerPoint presentations, web site links, and other information. It can be accessed at [www.fldoe.org/workforce/ced](http://www.fldoe.org/workforce/ced). In addition, middle school students now begin making decisions about their high school Major Areas of Interest (MAI), which includes career and technical MAIs.

To aid students in their career exploration and planning activities, Florida's career information delivery system, CHOICES Planner ([www.flchoices.org](http://www.flchoices.org)), includes assessments for interests, skills, values, and aptitudes as well as databases of careers, financial aid, Programs of Study, and postsecondary schools. Students use the CHOICES Planner to assess their interests and connect them to occupations. Occupations are also matched to Career Clusters along with postsecondary programs and the schools that offer them. Students can use their Career Cluster(s) interest selections to review a general high school Program of Study in CHOICES. Statewide Programs of Study samples are also available to students through a web-based student academic advisement system called Florida Advising and Counseling Tracking System (FACTS.org). Students will be able to determine the availability of high school career and technical education programs through the Electronic Personal Education Planner (ePEP) and can plan a sequence of courses within their chosen Career Cluster. Through CHOICES Planner and FACTS.org, students will learn about career and technical Programs of Study (high school and postsecondary offerings).

Students who plan a challenging Program of Study that is aligned with rigorous high school graduation requirements and a Major Area of Interest in career and technical education will be able to acquire the skills and knowledge to enter the workplace and/or pursue postsecondary education/training.

- (e) **Secondary and Postsecondary Career and Technical Education Programs and Expansion Efforts to Access Appropriate Technology in Career and Technical Education Programs**  
Florida's focus on high skill, high wage or high demand occupations encourages the strong involvement of business and industry in the design, implementation, and assessment of career and technical education programs. This process encourages improvements in curriculum and technology to enhance the relevance of programs and to ensure student success upon completion. As technology has continued to evolve in virtually all industry sectors, career and technical education programs have also evolved to ensure that students are provided with opportunities to acquire the latest technology skills needed to fill current and projected workforce demands. The ability of students to access and use technology as part of the instructional process is critical to assuring that they are prepared to participate in a highly competitive and technologically advanced global economy.

*Secondary Career and Technical Education Programs*

Secondary career and technical education initiatives currently being implemented in Florida involve the development of curriculum for middle and high school students that is academically and technologically rigorous, rooted in career preparation, and focused on transition to postsecondary education and training. All career and technical education programs in the state are aligned with the Florida Sunshine State Standards, which provides expectations for student achievement in Florida. In many cases, career and technical education programs are also aligned with other nationally recognized standards such as the Standards for Technological Literacy (STL) or the National Academy Foundation (NAF), among others.

To provide students with a firm foundation for the skills required for success in the workplace, the Secretary's Commission on Achieving Necessary Skills (SCANS) competencies are integrated into career and technical education program frameworks. The competencies focus on three major areas: curriculum and instruction, career guidance and counseling, and increasing business partnerships in secondary career and technical education programs. Additionally, all technology-oriented programs integrate 21<sup>st</sup> Century Skills instructional strategies that require students to acquire digital-age literacy, inventive thinking, effective communications, and high productivity.

*Postsecondary Career and Technical Education Programs*

Florida has 45 Technical Centers and 28 Community Colleges throughout the state, many of which have multiple locations. Postsecondary career and technical education credentials offered in Florida consist of Postsecondary Adult Vocational Certificates (PSAV), Applied Technology Diplomas (ATD), college credit certificates (CCC), Associate in Applied Science Degrees (AAS) and Associate in Science Degrees (AS). The curricula of all these programs have been and continue to be analyzed and evaluated to ensure the curriculum remains relevant. Identification of occupations on Florida's Targeted Occupations List ensures that postsecondary programs prepare students for occupations that are identified as high skill, high wage or high demand. All new secondary programs are evaluated for their applicability and transfer to postsecondary student populations and for articulation at the community college level.

Postsecondary adult vocational programs include technical and academic skills necessary for students to obtain gainful employment. These programs have established minimum basic skill levels for completion to ensure that students possess the academic skills identified by business and industry for entry into specific occupations.

Applied Technology Diplomas (ATD) programs are designed to provide students with the opportunity to pursue training that leads directly to work or that may be transferred to a community college as part of an AS degree. These programs are designed to be part of the AS degree, be less than 60 college credit hours in length, have guaranteed articulation, and include technical skills integrated with academic skills.

#### *Statewide Expansion Efforts to Access Appropriate Technology*

The following initiatives at the state level serve to motivate students, schools, and districts to embrace and integrate technology into their curriculum, and in some cases, reduce the overall cost of acquiring, maintaining, and professional development training on technologies used to improve student performance and contribute to student access to emerging technologies.

- *Discount pricing for certification exams* - Florida has negotiated with two national organizations offering industry-recognized certifications to provide exams at a significant discount, thus improving the accessibility by students
- *Reduced and uniform software pricing*- Florida has successfully negotiated with providers of computer software, hardware, and peripheral equipment to reduce the financial burden experienced by districts statewide. This essentially permits districts to expand their curriculum and technology offerings to schools and ultimately their students
- *SharePoint portal available statewide*- The Division of Workforce Education is currently pursuing the creation of a SharePoint portal which will be accessible to every classroom in the state via *Sunshine Connections*, the statewide web-based portal. This portal will facilitate the creation, review, and update of over 900 career and technical curriculum frameworks without expenditure of district travel and related expenses. Such a reduction serves to extend the value of existing district funding levels. This initial effort is the first stage of a vision of a statewide collaborative environment wherein students from different schools across the state (and nation) are able to collaborate with other students and organizations in real time
- *Professional Development Institute*- Florida has set aside funds to defray the cost for teacher professional development related to technology. This initiative achieves two goals: 1) Teachers acquire skills using the appropriate technologies and subsequently integrate the technologies into their curriculum materials, with the ultimate benefactor being their students; 2) Districts are able to extend the value of their existing funding levels due to the reduction of anticipated travel expenditures
- *New Program Development*- Districts statewide are encouraged to implement new curriculum offerings on emerging technologies such as Geospatial Information Systems, Game/Simulation/Animation, and Scientific Visualization
- *Curriculum Resources* - In an effort to encourage student and teacher expanded opportunities for using appropriate technologies, FLDOE is promoting adoption of online reference materials and e-books for CTE programs statewide. In addition to providing greater student access to newer technologies, Districts and schools should also realize a cost savings in textbook expenditures
- *Technical High Schools*- A number of districts in Florida are now building, or have previously constructed technical high schools in partnership with key industry players in their

region. These schools are highly rigorous and focused on a range of specific technologies in support of their regional workforce demands. Examples include a new AAA high school built in concert with the Mayo Clinic to support their high tech workforce needs, and another new high school that offers programs oriented to those technologies supporting NASA and simulation and digital media industries in Florida's High Tech Corridor

- *Virtual School*- Florida Virtual School (FLVS) is an established leader in developing and providing virtual K-12 education solutions to students nationwide. A nationally recognized e-Learning model, FLVS was founded in 1997 as the country's first statewide Internet-based public high school

**(f) Criteria Used to Approve Eligible Recipients for Funds Under the Act**

The Division of Workforce Education evaluates all applications for funding under the Act to determine that the eligible recipient plans to utilize the funds in accordance with provisions of the Act, including, but not limited to, promoting continuous improvement in academic achievement and technical skill attainment and addressing current or emerging occupations.

Eligible recipients will be required to submit a local application. At a minimum, eligible recipients will be required to provide descriptions of the following:

- (1) How the career and technical education programs required will be carried out with funds received under this Title
- (2) How the career and technical education activities will be carried out with respect to meeting state and local adjusted levels of established performance
- (3) How the eligible recipient will:
  - Improve the academic and technical skills of students participating in career and technical education programs by strengthening the academic and career and technical education components of such programs through the integration of coherent and rigorous content aligned with challenging academic standards and relevant career and technical education programs to ensure learning in the core academic, and career and technical education subjects
  - Provide students with strong experience in and understanding of all aspects of an industry
  - Ensure that students who participate in such career and technical education programs are taught to the same challenging academic proficiencies as are taught to other students
- (4) How comprehensive professional development (including initial teacher preparation) that promotes the integration of coherent and rigorous content aligned with challenging academic standards and relevant career and technical education (including curriculum development) will be provided for career and technical education, academic, guidance, and administrative personnel
- (5) How parents, students, teachers, faculty, administrators, career guidance and academic counselors, representatives of business and industry, labor organizations, representatives of special populations, and other interested individuals are involved in the development, implementation, and evaluation of career and technical education

programs assisted under this Title, and how such individuals and entities are effectively informed about, and assisted in understanding, the requirements of this title, including career and technical Programs of Study

- (6) How the eligible recipient will provide a career and technical education program that is of such size, scope, and quality to bring about improvement in the quality of career and technical education programs
- (7) The process that will be used to evaluate and continuously improve the performance of the eligible recipient
- (8) How the eligible recipient will:
  - Review career and technical education programs, and identify and adopt strategies to overcome barriers that result in lowering rates of access to or lowering success in the programs for special populations
  - Provide programs that are designed to enable the special populations to meet the local adjusted levels of performance
  - Provide activities to prepare special populations, including single parents and displaced homemakers, for high skill, high wage or high demand occupations that will lead to self-sufficiency
- (9) How individuals who are members of special populations will not be discriminated against on the basis of their status as members of the special populations
- (10) How funds will be used to promote preparation for non-traditional fields
- (11) How career guidance and academic counseling will be provided to career and technical education students, including linkages to future education and training opportunities
- (12) Efforts to improve:
  - The recruitment and retention of career and technical education teachers, faculty, and career guidance and academic counselors, including individuals in groups under represented in the teaching profession
  - The transition to teaching from business and industry

See Appendices C.1 and C.2 for the secondary and postsecondary Request for Local Applications (RFAs).

Perkins IV strengthens the connections between secondary and postsecondary education by requiring local eligible agencies to offer career and technical education Programs of Study. Special emphasis will be placed on the implementation of Programs of Study aligned with the Career Clusters initiative. Evaluative criteria has been developed that will serve as a guide to review and approve local plans. As Florida consolidates its Tech Prep delivery system into the Basic State Grant, key Tech Prep core elements have been identified and eligible recipients will be required to allocate a minimum percentage of their local allocation to support and strengthen the identified elements.

The local application process will include an improvement plan for each performance indicator that falls below 90% of the final agreed upon level of performance; a description of how the funds will be used to address those items in the improvement plan; and a detailed budget summary.

In 2006, the Division of Workforce Education developed a web-based data verification tool that served as a data accuracy check with eligible recipients prior to submission of the *2005-06 Consolidated Annual Report*. In 2008, the Division will enhance this tool to assist with the local accountability performance review. This interactive tool will provide eligible recipients with local performance data as it relates to the state-negotiated performance levels by performance indicator and will be the means for local negotiations and submission of performance improvement plans.

In addition, the Division of Workforce Education has developed guidelines for determining “size, scope, and quality” to assist eligible recipients, who must provide assurances that these guidelines are being met in their local plans and applications.

**(g) Preparation of Career and Technical Education Students for a High School Diploma**

Students entering the ninth grade in Florida will select a Major Area of Interest (MAI) that will be the basis for their placement in a series of courses (or Program of Study) that will serve as a guide toward high school graduation. Local educational agencies will provide a student who selects an MAI in career and technical education with a Program of Study related to the selected MAI. Florida has developed more than fifty sample career and technical education Programs of Study available for public viewing at the Division of Workforce Education web site. The Florida Department of Education and local educational agencies are continuing to develop additional Programs of Study, including additional career and technical education Programs of Study. The career and technical education Programs of Study incorporate academic and career and technical courses that allow the student to earn the credits required to be awarded a high school diploma, while at the same time preparing the student for postsecondary education or entry into a high skill, high wage or high demand occupation.

Florida includes secondary students who are members of special populations in career and technical education programs and provides them the same counseling, guidance, instruction and learning opportunities afforded other career and technical education students. These special populations include:

- Individuals with disabilities, as defined in the Individuals with Disabilities Education Improvement Act of 2004 (IDEA)
- Individuals from economically disadvantaged families, including foster children
- Individuals preparing for nontraditional training and employment
- Single parents, including single pregnant women
- Displaced homemakers
- Individuals with limited English proficiency

Local educational agencies expect all career and technical education students, including special population students, to perform to the state standards. However, in accordance with the IDEA, eligible recipients will make necessary accommodations for students with disabilities in accordance with their Individual Educational Plans (IEP).

Careful planning of a challenging Program of Study aligned with rigorous high school graduation requirements, including a Major Area of Interest in career and technical education, will provide all students, including special populations, with the necessary information to prepare for successful graduation with a diploma. Planning will also encourage students to consider their long-range goals for postsecondary education and future careers.

**(h) Preparation of Career and Technical Education Students for Postsecondary Education or Entry into High Skill, High Wage or High Demand Occupations in Current or Emerging Occupations and Awareness of Such Opportunities**

Each year, a Workforce Estimating Conference, chaired by a representative of the Governor's office, is held to develop the state's *Targeted Occupations List* and the *High Wage/High Skills List* based on the occupations that meet the wage and growth criteria specified by the conference. The occupations on that list are linked to postsecondary workforce programs by the Department of Education. These lists, publicized and distributed through Florida's twenty-four (24) Regional Workforce Boards, are used by postsecondary educators to focus their program development efforts and to channel their funding resources.

In addition, the Regional Workforce Boards are guided by these lists to develop contracts with public and private postsecondary institutions for the training of unemployed or underemployed workers.

**(i) Use of Funds to Improve or Develop New Secondary and Postsecondary Career and Technical Education Courses that Lead to Employment in High Skill, High Wage or High-Demand Occupations**

As indicated in (h) above, program offerings are aligned with industry needs through a statewide process that identifies targeted occupations meeting high skill, high wage or high demand criteria. Secondary and postsecondary institutions are strongly encouraged to invest their state and federal resources in programs that qualify for the regional or state targeted occupational list and for the high wage, high skill or high demand list.

As a result of the Perkins IV legislation, Florida is taking specific measures to assure that federal funding is being invested in improving or developing secondary and postsecondary career and technical education courses leading to employment in high skill, high wage or high demand occupations. Florida has developed "size, scope, and quality" programmatic requirements for Perkins funding eligibility. One of the programmatic elements of "quality" requires that secondary and postsecondary eligible recipients must provide students with the opportunity to participate in a career and technical education program that is classified as high skill, high wage or high demand.

A further strategy to assure the focus on high skill, high wage or high demand programs involves the annual review of the state's curriculum frameworks. In cooperation with educational and business/industry partners, the Division of Workforce Education's Standards, Benchmarks and Frameworks unit designs and validates postsecondary career and technical education courses and programs to ensure the curricula are academically challenging and technically relevant. Business and industry partnerships on the local, regional, and statewide level also establish that the development and expansion of new or existing programs are responsive to the needs of the business community and are preparing a workforce for current and emerging occupations.

**(j) Communications on Best Practices among Successful Recipients of Tech Prep Program Grants under Title II**

All Title II Tech Prep funds will be merged with Title I Basic State Grant funds in FY 2009 (program year 2008-2009).

**(k) Linking Secondary and Postsecondary Career and Technical Education Programs to Increase Student Academic and Career and Technical Achievement**

Florida will use a linked series of integrated academic and career and technical education courses, career academies, Programs of Study, and seamless articulation to increase student academic and career and technical education achievement.

*Integrated Courses*

With the passage of state legislation requiring the implementation of secondary reform initiatives, the Florida Department of Education has developed technical assistance entitled *Development of Applied, Integrated, and Combined Courses* ([www.fldoe.org/APlusPlus](http://www.fldoe.org/APlusPlus)) to encourage the development of career and technical education courses that integrate challenging academic standards with relevant technical content. These courses are processed and reported like any other new secondary course and are flagged in the directory so reporting student participation and performance will be possible through the student unit record data reporting system. For example, an integrated biotechnology program allows students to receive both academic credit towards their high school graduation requirement for science and career and technical education credit.

Over the past five years, the Florida Department of Education has provided funding support to the Volusia/Flagler Career Connection Consortium project entitled the *CTE/FCAT Connections Program*. This is an initiative that aligns rigorous academic content and student academic achievement. Specifically, the program is a curriculum project written by high school and middle school career and technical education teachers in Volusia, Flagler, Hillsborough, Alachua, Pasco and Dade counties through the leadership of the Volusia district team and the Florida Association for Career and Technical Educators (FACTE). As of June 2006, the initiative has produced 208 lesson plans, each five to 25 hours in length, that link the highly tested *Sunshine State Standards* (Florida's essential standards) and the International Center for Leadership in Education's *Essential Work Skills* (Curriculum Survey of Essential Skills) to the career and technical education course frameworks. The lesson plans contain direct connections to rigorous and relevant reading, math, and science skills taught using real-world applications. Eighteen of the lesson plans are for courses that provide a pathway leading to an industry certification. Career and technical education teachers in thirty-eight counties in Florida have already received training to teach the lessons, which are published on the Internet for use by all teachers.

*Career Academies*

At the secondary level, Perkins IV funds will support and enhance Florida's career academy initiative that serves as the crossroad between academic and career and technical education. Since 1993, the Florida Department of Education has recognized the career academy model as a comprehensive approach to restructuring secondary schools and increasing student academic and career and technical achievement.

While the concept of career academies was established in the 1970's as a dropout prevention program that integrated academic and vocational training, Florida's career academies include students of all skill levels and abilities as well as those at risk of dropping out of high school. The state's 450+ career academies provide students with qualifications they can use to either pursue a college education or enter directly into the workforce upon graduation, whichever is most appropriate for the individual student.

A 2004 Florida Career Education Study Task Force recognized that a clear need exists for high school graduates who are both well educated and technically competent and that Florida's economic development requires a skilled and educated workforce. The Task Force recommended that "Every Florida middle and high school should provide an instructional delivery system which draws on best practices/models and incorporates career academies, institutes, and industry certifications."

Building upon the recommendations of the 2004 Florida Career Education Study Task Force, the 2006 Florida Legislature defined and described the career academy model in House Bill 7087, An Act Relating to Education, more commonly known as the A++ Bill. The 2007 Florida Legislature passed SB 1232, the Florida Career and Professional Education Act requiring every school district to have at least one career and professional academy operational during the 2008-2009 school year. Section 27, s1003.493, Florida Statutes, defines a career and professional academy as a "research-based program that integrates a rigorous academic curriculum with an industry-driven career curriculum." Upon completion of a career academy, students graduate with a high school diploma, the highest available industry certification and/or college credit linked directly to the career theme of the program.

The Florida Department of Education recognizes the ten key elements of the Career Academy National Standards of Practice (NSOP) as a method towards successful implementation of the career academy model. Analysis of curriculum integration is vital in measuring student achievement in career academies. Developed by an informal consortium of career academy organizations, the ten standards are designed to raise achievement levels and other educational outcomes for students. Numerous school districts in Florida have undergone the rigorous career academy certification process by the National Career Academy Coalition and many are currently in the certification evaluation cycle. Career academies are measured against a rubric containing the ten National Standards. The rubric is a tool to both measure implementation and the success of career academies, and to help scale up existing academy efforts towards specific targets.

A reflection of Florida's commitment to the growth and expansion of career academies in all of the state's 67 school districts is the fact that, over the past three years, over 19 million dollars of state funding has been made available to school districts to design, expand, or implement new career academies through the SUCCEED Florida Career Paths Program. Over 170 career academies have benefited from this state support.

#### *Programs of Study*

Perkins funding will be used to support the development, enhancement and maintenance of Programs of Study that are aligned with the 16 Career Clusters. By identifying appropriate academic courses for career and technical education participants, Programs of Study will provide a valuable roadmap for students to progress through the education system and be prepared for continuing their education beyond high school. This valuable guidance tool will increase student

awareness of their education and career goals serving as a catalyst to improved academic and technical achievement.

#### *Seamless Articulation*

Florida has implemented several strategies to ensure seamless articulation of programs from secondary through postsecondary education. Inter-institutional agreements between local high schools and community colleges have increased as a result of Tech Prep. Florida is moving beyond local articulation agreements that began with Tech Prep and, through Program of Study initiatives, will develop statewide articulation agreements that will enhance the transfer of credit among delivery systems. In addition, curriculum frameworks and student performance standards have been developed by faculty teams to facilitate both vertical and horizontal transfers among all postsecondary institutions.

Acceleration mechanisms provide increased opportunity for career and technical secondary and postsecondary education students. These mechanisms include: dual enrollment, early admission, advanced placement, credit by examination, and the International Baccalaureate program. Acceleration mechanisms provide options to students who are motivated to shorten the time needed to complete degree requirement and to pursue opportunities for their own educational development.

### **(I) Evaluation of the Integration of Coherent and Rigorous Content Aligned with Challenging Academic Standards in Career and Technical Education Programs**

In 2007, the Office of Program Policy Analysis and Government Accountability (OPPAGA) conducted an evaluation of Florida's career academies to study the performance of career academy students. The report revealed that "as in other states, Florida's career academy students outperform similar students while in high school. During high school, Florida career academy students are less likely to be chronically absent, more likely to score at grade level on math and reading FCAT tests, and more likely to graduate than similar students who did not attend career academies. (<http://www.oppaga.state.fl.us/reports/educ/r07-40s.html>) As previously mentioned, Florida supports career academies which deliver integrated academic and career and technical education and will continue to evaluate the impact of an integrated instructional delivery system on the performance of students.

Referenced in section "k" above is a statewide curriculum project which has been in progress for the past five years. Volusia County has undertaken some evaluation studies within their own secondary schools to determine the impact of the use of the integrated lesson plans on student learning outcomes and achievement. The preliminary data indicates a positive effect especially on students scores attained on Florida's high stakes test, the "FCAT." Further evaluation studies are planned to analyze the performance data of students enrolled in programs utilizing the CTE/FCAT Connections lesson plans as compared with other classes in which these lesson plans have not been adopted.

### **2.3 Comprehensive Professional Development for Career and Technical Education Teachers, Faculty, Administrators, and Career Guidance and Academic Counselors [Sec. 122(c)(2)(A)-(G)]**

The State will provide leadership, technical assistance, and resources to support and advance professional development activities focused on improving the instructional skills of personnel working with career and technical education students. Florida's comprehensive professional

development system will address initial teacher preparation and the continuous improvement needs of career and technical education teachers, faculty, administrators, and career guidance and academic counselors.

During 2007-08 academic year, funding was allocated to support a Professional Development Institute the goals of which are: *to develop, administer and implement a procedure for mini-grant awards to assist career and technical education teachers in obtaining industry certifications and to plan and coordinate professional development activities statewide.* The Professional Institute Request for Proposal (RFP) may be viewed at:

<http://www.fldoe.org/workforce/dwdgrants/2007/perkinsslaeaf107.asp>

The following principles guide Florida's approach to professional development:

- The development of staff knowledge and skills is intimately related to, and a function of, the teaching and learning needs of the student groups served, and organizational performance as defined by various outcome measures
- Professional development is most effectively organized and delivered at the local level, with maximum participation in program design by those most affected
- Professional development will include all levels of cognitive and behavioral assimilation, including its organizational development aspects. Professional development is far too often an awareness level activity that relies on the professional to transfer a practice or activity into a live working situation and organizational context
- The best assessment of professional development is its impact on performance in a live working environment and on organizational performance
- Since major program elements are being more tightly integrated through unified planning, professional development must also be planned and delivered in a highly collaborative framework

(a) **Promotion of Integrated Academic and Career and Technical Education Curricula and Opportunities for Academic and Career and Technical Teachers to Develop and Implement Curricula and Pedagogical Strategies**

The Florida Department of Education supports projects that promote the integration of career and technical education and academics to career and technical education instruction statewide. An example of such training includes the previously referenced Career and Technical Education/FCAT Connections project, an initiative that aligns rigorous academic content and student academic achievement. Other initiatives include targeted professional development to career and technical education instructors statewide on topics such as: Florida Comprehensive Assessment Test (FCAT); *Reading, Writing, Math and Science in the Career and Technical Education Classroom*; High Schools That Work; Student Assessment; and *Implementing Career Academies*. The Division of Workforce Education supports the compilation and dissemination of "*Best Practices: Strategies to Support High School Reform through Career Education.*"

**(b) Increasing the Percentage of Teachers that Meet Teacher Certification or Licensing Requirements**

The Division of Workforce Education will, during the 2007-08 academic year, fund an intermediary organization or “Professional Institute” to provide professional development to career and technical educators statewide. The Division of Workforce Education will award funds to an experienced organization to develop, administer, and implement a program that will allow career and technical educators to obtain an industry certification. Through this program, educators will be reimbursed for industry certification training and examination costs provided they successfully pass the examination and commit to continue teaching within the district for a minimum of two years.

In addition, the Division of Workforce Education collaborates with career and technical education teacher preparation programs in colleges and universities throughout the state, as well as the Florida Department of Education’s Bureau of Educator Certification, to promote teaching careers in career and technical education and increase the percentage of teachers that meet teacher certification and/or licensing requirements.

**(c) High Quality, Sustained, Intensive Professional Development Focused on Instruction, Increases the Academic Knowledge and Understanding of Industry Standards**

High quality, sustained, and intensive career and technical education professional development will be delivered statewide via an intermediary organization or “Professional Institute.” The Professional Institute will be identified through a competitive solicitation to provide professional development to career and technical educators. For 2007-2008, the Professional Institute will provide mini-grants to career and technical educators throughout the state to assist them with earning industry certifications necessary for the programs they teach.

A statewide Career and Technical Education Professional Development Committee will be appointed by the Chancellor of Workforce Education to set priorities and criteria for obtaining the mini-grants. The Committee will be composed of Division of Workforce Education staff, career and technical education practitioners, and others deemed appropriate by the Chancellor. The Department of Education will monitor the Professional Institute with regard to budget, outcomes, deliverables and customer satisfaction.

In 2007-2008, the Professional Institute will be responsible for developing a process for assessing needs, setting goals and outcomes, designing evaluation studies to evaluate professional development, and developing a five year professional development plan. Other priorities for the Professional Institute include sharing best practices for the quality delivery of instruction to special populations, the development and implementation of Programs of Study aligned to Career Clusters and Career Pathways, and the development of instructional strategies for the integration of academic and career and technical education.

**(d, e) Applied Learning that Contributes to the Academic and Career and Technical Knowledge of the Student and Provides the Knowledge and Skills Needed to Work with and Improve Instruction for Special Populations**

Professional development activities that emphasize applied learning and the delivery of instruction for special populations will be provided by the Professional Institute and will be addressed in its comprehensive five-year plan.

(f) **Integration with Professional Development Activities that the State Carries Out under Title II of the Elementary and Secondary Education Act of 1965, as amended, and Title II of the Higher Education Act of 1965, as amended.**

The composition of Florida's Perkins Plan Steering Committee, comprised of the Commissioner of Education and the Chancellors of the Division of K-12 Public Schools, the Division of Workforce Education and the Division of Community Colleges, will assure the inter-agency planning and coordination of all federal educational programs. The Division of Workforce Education will coordinate professional development plans with other offices within the Florida Department of Education.

**2.4 Career and Technical Educator Recruitment and Retention Efforts [Sec. 122(c)(3)(A)-(B)]**

(a) **Recruitment and Retention of Career and Technical Education Teachers, Faculty, and Career Guidance and Academic Counselors, including Individuals in Groups Underrepresented in the Teaching Profession**

The Division of Workforce Education collaborates with career and technical teacher preparation programs in colleges and universities throughout the state, as well as the Florida Department of Education's Bureau of Educator Certification, to promote teaching careers in career and technical education. Teacher industry certification grants are another strategy to enhance statewide recruitment efforts and improve retention through the required commitment of the educator and the district. Eligible recipients will be required to identify (in their local plan and application) efforts that will be utilized for the recruitment and retention of career and technical education teachers, faculty, and career guidance and academic counselors, including individuals in groups underrepresented in the teaching profession.

(b) **Transition to Teaching from Business and Industry, including Small Business**

The Division of Workforce Education collaborates with the Florida Department of Education Bureau of Educator Certification to promote alternative teacher certification programs to improve the transition to teaching from business and industry, including small business. Eligible recipients will be required to identify (in their local plan and application) efforts and strategies to recruit, retain, support and mentor new teachers transitioning from business and industry.

**2.5 Transition of Subbaccalaureate Career and Technical Education Students into Baccalaureate Degree Programs at Institutions of Higher Education [Sec. 122(c)(4)]**

Statewide articulation agreements and guaranteed course transfers are articulation mechanisms facilitating student transfer to the next education level without unnecessary course or content duplication. These articulation agreements provide transition opportunities from certificate to degree programs and from AS degree programs to four year BAS degree programs.

Florida's ongoing statewide articulation initiatives provide a framework for implementing Programs of Study as required by the Act. By building on model Tech Prep Programs of Study, the Division of Workforce Education will collaborate with eligible recipients to implement Programs of Study that incorporate the required elements including baccalaureate degree program options. Florida plans to develop at least one statewide secondary to postsecondary (AAS/AS) articulation agreement for each of the Career Clusters that are implemented.

**2.6 Involvement of Parents, Academic and Career and Technical Education Teachers, Administrators, Faculty, Career Guidance and Academic Counselors, Local Business (including small businesses), and Labor Organizations in the Planning, Development, Implementation, and Evaluation of Career and Technical Education Programs in Florida [Sec. 122(c)(5)]**

Stakeholders (parents, teachers, local business and industry, organized labor, organizations that represent students with special needs and students) currently provide input at the local and state levels in the development, implementation and evaluation of career and technical programs. Each career cluster area has an established state technical advisory committee. These committees are comprised of stakeholders who review frameworks, current economic trends and emerging occupations. Recommendations are incorporated into frameworks and implemented at the local level, ensuring that programs incorporate industry and academic standards, meet or exceed established state or locally negotiated performances levels, and offer progressive training. Committees with the same membership and charge function also are present at the school, district, community college and regional levels.

**2.7 Efforts to Improve the Academic and Technical Skills of Students through the Integration of Academics with Career and Technical Education; Efforts to Provide Students with Strong Experience in, and Understanding of, All Aspects of an Industry; and Ensure that Students who Participate in Career and Technical Education Programs are Taught to the Same Challenging Academic Proficiencies as Taught to All Other Students [Sec. 122(c)(7)(A)-(C)]**

In Florida, students are given the guidance and tools to develop a challenging Program of Study which includes rigorous and challenging high school graduation requirements and a major area of interest in career and technical education to acquire the skills and knowledge to enter the workplace and/or postsecondary education/training.

*Academic and Career and Technical Integration*

Florida's career academy initiative represents one instructional delivery model that integrates academics with career and technical education to ensure learning in core academic subjects and career and technical education subjects. The 2006 Florida Legislature defined and described the career academy model in House Bill 7087, An Act Relating to Education, more commonly known as the A++ Bill. In 2007, the Florida Legislature passed SB 1232, the Florida Career and Professional Education Act requiring every school district to have at least one career and professional academy operational during the 2008-2009 school year. Section 27, s1003.493, Florida Statutes, defines a career and professional academy as a "research-based program that integrates a rigorous academic curriculum with an industry-driven career curriculum." Upon completion of a career academy, students graduate with a high school diploma, the highest industry certification and/or college credit linked directly to the career theme of the program.

The Florida Department of Education recognizes the ten key elements of the Career Academy National Standards of Practice (NSOP) as a method to successful implementation of the career academy model. Developed by an informal consortium of career academy organizations, the ten standards are designed to raise achievement levels and other educational outcomes for students. Numerous school districts in Florida have undergone the rigorous career academy certification process by the National Career Academy Coalition and many are currently in the certification evaluation cycle. Career Academies are measured against a rubric containing the ten National Standards. The rubric is a tool to both measure implementation and the success of

career academies, and to help scale up existing academy efforts towards specific targets. Analysis of curriculum integration is one of the elements that have been correlated with improved student achievement in career academies.

In addition, the Division of K-12 Public Schools is currently revising the Sunshine State Standards. All career and technical education curriculum frameworks will be updated with the revised Sunshine State Standards.

#### *All Aspects of Industry*

Students entering 6th grade in 2006-2007, must complete one semester course in career and education planning in the 7th or 8th grade to be promoted from middle school to high school. Teachers, including career and technical education teachers, and counselors have been trained in the career development process and the tools and information they will use to assist students in their career decision making. Course outcomes include students learning about Career Clusters and career and technical education Programs of Study offered at the secondary and postsecondary level.

An online program available without cost to all Florida middle school and high school students that further enables them to explore all aspects of an industry is the CHOICES Planner. Available in English and Spanish, the CHOICES Planner is an online career information delivery system that helps students compare, connect, and choose from a wide range of work and education options and build personalized career plans. Integral to this online program are interest, aptitude and ability self-awareness assessments that enable students to connect their interests to occupations. Occupations are also matched to career clusters along with postsecondary programs and the schools that offer them. Students can use their career cluster(s) interest selections to review a general high school program of study in the CHOICES Planner.

Numerous career and technical education programs provide opportunities for industry experience and understanding through the acquisition of industry certifications, clinical site rotations, directed study, cooperative education, on-the-job training (OJT), internships, job shadowing, and mentoring. Of special note is the industry experience students gain through participation in Career and Technical Student Organizations (CTSOs). These co-curricular organizations are essential components of all quality career and technical education programs and include comprehensive leadership training, local, state, and national competitive events, community service, and career planning.

#### *Challenging Academic Proficiencies*

All students in Florida are now required to graduate from high school with a prescribed academic program which includes twenty-four (24) credits of academic coursework. There are no exceptions to this requirement for any career and technical education student. Attention is also being focused on the academic components within career preparation programs. Career and technical education programs are designed and validated in cooperation with business and industry partners to ensure the curricula are academically challenging and technically relevant. The standards-based career and technical education programs are also aligned to the Sunshine State Standards, which provide specific student performance standards and benchmarks that

outline what students should know and be able to do upon completion of each course, including academic expectations and technical skills.

Postsecondary career and technical education programs are also designed and validated in cooperation with business and industry partners to ensure the curricula are challenging academically and technically relevant. The postsecondary career and technical credentials offered in Florida range from Postsecondary Adult Vocational Certificate (PSAV) to Associate in Science Degrees (AS). Program offerings are aligned with industry needs through a statewide process that identifies targeted occupations meeting high skill, high wage or high demand criteria.

## **2.8 Technical Assistance to Local Educational Agencies, Area Career and Technical Education Centers, and Eligible Institutions in the State [Sec. 122(c)(15)]**

Florida provides leadership, technical assistance and resources to develop programs and instructional materials that enable students in career and technical education programs to acquire the academic, career and technical skills required to enter and remain in their chosen career path. Emphasis is placed on instructional support, program support and policy clarifications. An example includes the development of instructional materials and products that integrate academics and career and technical education and provide a seamless path of courses leading to the highest level of occupational or educational attainment. Representatives of business and industry serve on statewide advisory committees to assure that curriculum materials reflect industry standards and statewide labor market needs.

The Division of Workforce Education provides technical assistance and leadership for secondary and postsecondary education programs on an ongoing basis. The Bureau of Grants Administration and Compliance, and the Bureau of Career, Technical, and Apprenticeship Programs support practitioners and institutions through:

- assistance with program development responsive to student and industry needs
- assistance with staff development and other activities to ensure continuous improvement of career and technical programs through state-of-the-art technology and instructional practices
- assistance with staff development for program success for students with disabilities
- assistance with strategies to ensure equity among programs designed for single parents, displaced homemakers, and single pregnant women
- sharing of best practices, including strategies for special populations, including underrepresented genders in non-traditional programs

In addition to direct technical assistance to eligible recipients, the Division of Workforce Education program and accountability staff members, in coordination with other Department of Education offices, support continuous career and technical education program improvement by:

- Publishing technical assistance papers which provide guidance and clarification on a

broad variety of procedural and policy issues

- Providing student data and tracking information to enhance student performance tracking
- Identifying career and technical education programs and courses to satisfy Bright Futures Gold Seal Vocational Scholarship eligibility
- Developing and distributing counseling and career preparation materials

## **2.9 Description of How Career and Technical Education Relates to State and Regional Occupational Opportunities. [Sec. 122(c)(16)]**

Florida recognizes that career and technical education programs must meet industry standards for high skill, high wage or high demand occupations. The Workforce Estimating Conference develops the official state demand occupations list based on industry and occupational employment projections and wages prepared by the Florida Agency for Workforce Innovation, Labor Market Statistics office. Authorized under [§445.011](#) F.S., the Workforce Estimating Conference identifies the occupations and conferees consider forecasts of job openings, employment, program placements, and earnings in reaching consensus to identify high skill, high wage or high demand occupations. Also considered is employment placement information from the Florida Education and Training Placement Information Program (FETPIP) data collection and consumer reporting system that provides follow-up data on former students. The end result is a compilation of high skill, high wage, and high demand occupations ranked by their projected number of openings, projected growth rate, and expected entry-level wage rates.

The data and the processes adopted by the Workforce Estimating Conference conferees have served several purposes. The occupations identified as ranking high have been featured as employment opportunities in the career information products of the Division of Workforce Education as well as publications produced by several community colleges. Several local areas have adopted the conference's consensus process and methodology to develop local versions of the targeted occupations list. These lists then become targeted for training by local community colleges, school district technical centers, Workforce Investment Act training organizations, and others.

## **2.10 Joint Planning and Coordination with other Federal Education Programs. [Sec. 122(c)(17)]**

The formation of Florida's Perkins IV Plan Steering Committee, comprised of the Commissioner of Education and the Chancellors of the Division of K-12 Public Schools, the Division of Workforce Education and the Division of Community Colleges, will assure the ongoing inter-agency planning and coordination of all federal educational programs. Although initially convened to oversee and approve the development of the Perkins IV Five Year Plan, this Committee will continue to assure the coordination with other Federal Education Programs such as the Elementary and Secondary Education Act (PL 107-110) as amended under No Child Left Behind, the Workforce Investment Act of 1998 (PL 105-220), and the Individuals with Disabilities Education Act (PL 105-17). The Division of Workforce Education will also coordinate with other offices within the Florida Department of Education including, but not

limited to, the K-12 Public Schools Office of Assessment and Performance; the K-12 Public Schools Bureau of Exceptional Education and Student Services; and other state offices managing federal programs. The Division of Workforce Education will continue to collaborate throughout the duration of the five-year plan to ensure integrity in federal education programs.

**2.11 Procedures to Ensure Coordination and Non-Duplication Among Programs Listed in Sections 112(b)(8) and 121(c) of the Workforce Investment Act (Public Law 105-220) Concerning the Provision of Services for Postsecondary Students and School Dropouts. [Sec. 122(c)(20)]**

Section 121, Title I, Workforce Investment Act (WIA), sets expectations for recipients of Perkins postsecondary funds, or funds under Title II, WIA, Adult Education and Family Literacy, to enter into a Memorandum of Understanding with the Regional Workforce Board for participation in the One-Stop system.

Eligible postsecondary recipients are required to submit a *Regional Workforce Board Coordination Assurance Form* as part of the postsecondary local application package. (See Appendix C.2) The form requires the agency head to certify that the local application has been submitted to the Regional Workforce Board and the activities outlined in the local application are consistent with current Regional Workforce Board plans.